Personal development in Irish education: A longitudinal study of student participation and psychosocial development in Transition Year

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Thesis submitted to Dublin City University for the degree of Doctor of Philosophy

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> > July 2016

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List of acronyms and abbreviations

ASTI	Association of Secondary Teachers, Ireland
CAO	Central Applications Office
CSO	Central Statistics Office
DEIS	Delivering Equality of Opportunity in Schools
DES	Department of Education and Skills (formerly Science)
ERC	Educational Research Centre
ICC	Intraclass correlation
ISSU	Irish Second-level Students' Union
JCE	Junior Certificate examination
JCSP	Junior Certificate School Programme
LCA	Leaving Certificate Applied
LCE	Leaving Certificate (Established)
LCVP	Leaving Certificate Vocational Programme
LGM	Latent growth curve model
MLM	Multilevel model
MSLSS	Multidimensional Students' Life Satisfaction Scale
OECD	Organisation for Economic Cooperation and Development
NCCA	National Council for Curriculum and Assessment
PDST	Professional Development Service for Teachers
PISA	Programme for International Student Assessment
PMI	Psychosocial Maturity Inventory
RAPS	Research Assessment Package for Schools
SD	Standard deviation
SDT	Self-determination theory
SE	Standard error
SES	Socioeconomic status
SEQ-C	Self-efficacy Questionnaire for Children
SLSS	Students' Life Satisfaction Scale
SSP	School Support Programme (as part of DEIS)
SWB	Subjective wellbeing
TIMSS	Trends in International Mathematics and Science Study
TY	Transition Year
TYSS	Transition Year Support Service

The thesis would not have come to this point without the contribution of many supporting friends, family, and colleagues. I would like to express my gratitude to the Educational Research Centre – in particular, Peter Archer, Mary Rohan and Paula Chute – for providing financial, professional, and administrative support for the study. John Coyle gave generously of his time and his database management know-how to help me clear a path around several possible obstacles. Jude Cosgrove, Lorraine Gilleece, and Carly Cheevers all provided thoughtful feedback on specific sections that helped to improve the final product. Thanks to Rachel Perkins for the PhD chats (usually starting off somewhere between bafflement and exasperation, but ending in some level of reassurance). And special thanks to David Millar for his strong encouragement and plenty of practical help in getting the PhD off the ground in the first place.

I owe my supervisors, Michael O'Leary and Mark Morgan, a debt of gratitude for their constant encouragement, general advice, and (very sensible) specific comments on earlier drafts of the thesis. Thanks also to another Michael O'Leary (Transition Year Support Service) for his support for the study and for our early discussions which helped me to clarify the nature of the task. Jennifer Symonds provided helpful advice on Chapter 5. Two publications, Clerkin (2012) and Clerkin (2013), drew on parts of Chapter 1, and the comments from the anonymous reviewers of those papers also helped to clarify my thinking on the relevant sections.

To the principals, coordinators, teachers and students in the 20 participating schools: sincere thanks for your continued engagement with the study over several years. It was never taken for granted and the research would not have been possible without it. I hope that the findings of the study provide some measure of reward for your effort and your patience.

To my much-appreciated friends and to Cheryl: thank you for all the encouragement and (especially!) for well-timed distractions, which helped to make the final run-in a surprisingly stress-free experience.

To my family – especially my parents, Pauline and Séamus – above all else, this is for you. I hope you enjoy having it as much as I enjoyed working on it.

Finally, I would like to extend a special dedication for Richard Burke, former Minister for Education, who was responsible for introducing Transition Year more than 40 years ago. He passed away in March 2016 while this thesis was in final preparation. Ar dheis Dé go raibh a anam dílis.

The contribution of Transition Year to personal and social development among adolescents in Irish post-primary schools.

Aidan Clerkin

The Transition Year programme (TY) is a relatively 'non-academic' year embedded midway through the Irish post-primary education system. TY is intended to promote personal development, maturity, social skills, and to prepare students for adult life. Participation rates have been increasing since the 1990s and a majority of students now take part each year, mostly in schools where participation in TY is optional. Previous research, often interview-based, has found that students, teachers, and parents tend to regard the programme as a positive experience for most students. Participation can enhance students' sense of maturity, improve relationships with peers and teachers, and develop skills such as time management and the ability to work as part of a team. However, TY is noted as being relatively underresearched, despite being a uniquely Irish innovation. No study has previously sought to measure the extent of any differences in student development that might be attributable to TY participation.

This study builds on previous research by gathering quantitative data on a range of psychosocial outcomes and comparing changes over time between students who took part in Transition Year and those who did not. Outcome measures include school engagement, relationships with teachers, self-reliance, work orientation, subjective age, school satisfaction, life satisfaction, and social self-efficacy. These measures are complemented by extensive quantitative and qualitative data relating to students' direct perceptions and experience of Transition Year. Three waves of longitudinal data were collected, beginning when participants were in Third Year (pre-TY). Participating students were followed up one year later (in TY/Fifth Year) and two years later (in Fifth Year/Sixth Year). 1153 students in 20 schools took part in all three waves, with approximately 5500 students participating in at least one wave. Differences in psychosocial outcomes and experiences of TY are compared and are discussed with reference to previous research. The main conclusions, implications for policy and practice, and avenues for further research are highlighted.

Chapter 1: The Transition Year programme

This thesis examines the role of the Transition Year programme in fostering personal and social development among Irish second-level students. Transition Year is explicitly intended to promote socioemotional development – in broad terms, to give students time, space, and opportunities to mature. Previous research, reviewed below, points to positive outcomes associated with participation, as well as some reservations. However, the extant literature has not fully addressed the extent to which Transition Year participation may make a unique contribution to adolescents' development. This chapter and Chapter 2 present reviews of relevant literature regarding Transition Year and socioemotional development in adolescence more generally. The following chapters describe an empirical study taken with the aim of assessing the contribution of Transition Year participation to students' development, and how the programme fits into the broader context of Irish education.

Surveys of the Irish public generally report high levels of satisfaction with the Irish education system (Byrne & Smyth, 2011; Hannan & Shortall, 1991; Kellaghan, McGee, Millar & Perkins, 2004; Smyth, Banks & Calvert, 2011). However, the system has increasingly been criticised for perceived shortcomings in preparing students for life beyond school. Reservations often focus on aspects of education such as preparing students for the world of work, developing independent learning skills, preparing adolescents to participate actively in adult society, and promoting the growth of interpersonal skills and relationships among students (Hannan & Shortall, 1991; Kellaghan et al., 2004; Smyth et al., 2011). The dominance of the Leaving Certificate and the 'points race' over second-level education, to the possible detriment of these broader student outcomes and learning opportunities, continues to be a source of frustration to many students (Irish Second-level Students' Union, 2014; Smyth et al., 2011) and teachers (Kamp, Black & Abbott, 2014).

Such complaints are not unique to Ireland. Concerns over the effects of high-stakes terminal examinations such as the Leaving Certificate on other educational outcomes are eloquently summarised by Madaus' lament that "when test results are the sole or even partial arbiter of future educational or life choices, society tends to treat test results as the major goal of schooling rather than as a useful but fallible indicator of achievement" (Madaus, 1988, p. 43). When educational priorities are weighted too strongly in the direction of preparation for formal examinations in this manner, schools and systems run the risk of

"[failing] to fully acknowledge the contextual and socio-emotional factors that relate to children's development and subsequent school functioning" (Whitley, Huebner, Hills & Valois, 2012, p. 337). These criticisms hint at the challenges inherent in moulding a modern education system to shepherd students through the transition from childhood to adulthood, while preparing them for active participation in society.

In 2013, then-Minister for Education and Skills Ruairí Quinn acknowledged the need for Irish policy-makers and teachers to remain cognisant of issues beyond mere test results, commenting that "the debate on education needs to shift to the educational experience as well as more narrowly-focused attainment outcomes" (Quinn, 2013). Internationally, too, interest and investment in monitoring the development of social and emotional outcomes through childhood and adolescence is rapidly increasing (Axford, Hobbs & Jodrell, 2013; Ikesako & Miyamoto, 2015; Levin, 2012; Moore, Lippman & Ryberg, 2015). Zimmer-Gembeck and Mortimer (2006) pose the question more broadly on behalf of policy-makers worldwide: how can adolescents begin to be incorporated into the adult world without distracting them from school and from personal development?

This chapter introduces the Transition Year programme as one response to these challenges – firstly, within Ireland, and later, in a broader international context. Previous research on the programme is reviewed, and the aims of the current study are explicated.

1.1 Introducing the Transition Year programme

One way in which Irish Governments have attempted to address the issues referred to above is with the pioneering Transition Year programme. Transition Year (TY) is a non-academic 'gap' year in Irish secondary education. It is officially recognised as the first year of a threeyear senior cycle (Dept. of Education, 1993), although considered separate from the two-year Leaving Certificate (LCE) examination cycle. Students can participate in Transition Year after three years of lower secondary schooling that culminate in the Junior Certificate (JCE), before beginning the two-year Leaving Certificate programme. Alternatively, they may progress directly from the junior cycle to the senior examination cycle. Figure 1.1 displays the pathways that are open to students.

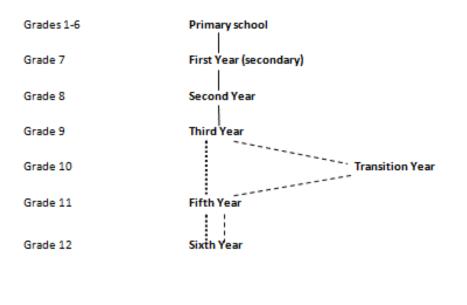


	Figure 1.1: Pathways through Irish secondary education
•••••	Transition Year non-participants (five years of secondary school in total)
	Transition Year participants (six years of secondary school in total)
	All students

The programme is currently offered in about nine-in-ten post-primary schools, but is unavailable in one-in-ten (discussed further in Section 1.3, below). In approximately onequarter of the schools that do provide a Transition Year, students' participation in the programme is considered compulsory by school management (Smyth, Byrne & Hannan, 2004). In the remainder, students are given the option of participating in TY or of moving directly to Fifth Year.

1.1.1 Programme characteristics

Transition Year is billed as an opportunity for students to learn about the world outside academia. There are no high-stakes examinations to speak of, so pressure to study is minimal. The Department of Education and Skills' guidelines for the implementation of TY specifically include the condition that Transition Year "should offer pupils space to learn, mature and develop in the absence of examination pressure" in order to "prepare them for their role as autonomous, participative and responsible members of society" (Dept. of Education, 1993).

Within these guidelines, schools are allowed considerable freedom to design their own Transition Year programme (ASTI, 1993; Humphreys, 1998). In practice, the structure and content of the year is often heavily dependent on individual teachers and leaders who are

committed to the idea of TY and drive the programme within their own school (Jeffers, 2010). This is consistent with international research regarding the importance of staff "will and skill" in implementing programmes of this nature, where socioemotional development is acknowledged as a primary goal (Humphrey, Lendrum, & Wigelsworth, 2010).

Jeffers' (2010) analysis identifies a range of issues arising from a school's decision to offer a Transition Year to their students. Chief among these is the need to create a Transition Year programme that is appropriate for the school – what Jeffers terms the 'domestication' of the programme – in contrast to the centrally-prescribed curriculum that is presented for other grade levels. Suggestions for subject content and templates for a variety of modules (or transition units) to use during TY are available from several published sources (e.g., ASTI, 1993; Carter & Ó Cairbre, 2011; Dept. of Education, 1993), as well as from the websites of the National Council for Curriculum and Assessment¹ (NCCA) and the Professional Development Service for Teachers.²

Nonetheless, teaching Transition Year classes can be a challenge for some teachers who report greater comfort when teaching examination-oriented classes with a more settled curriculum and focus (Jeffers, 2011). In a similar vein, substantial minorities of teachers in Jeffers' (2007a) case studies conveyed a desire to have access to a prescribed TY syllabus for their subject, even in schools selected for their well-regarded TY programmes. The role of politics in the implementation of the programme in also highlighted, with TY coordinators sometimes finding it a challenge to convince teaching colleagues to fully buy into the ethos of the programme and participate in cross-curricular collaborative approaches to planning the year (particularly when the coordinators are younger teachers or are female) (Jeffers, 2007a, 2010). Communication, commitment to the programme, and an awareness of not overstepping the boundaries of collegiality are seen to be key.

In general, a Transition Year programme usually includes standalone modules that vary between schools, but may cover topics such as first aid, electronics, road safety, deportment and personal grooming, business mini-companies and entrepeneurship, dance, foreign languages, and tasters for Leaving Certificate subjects or tertiary courses (e.g., philosophy, media studies). Classes in core examination subjects (e.g., English, Irish,

¹ See <u>www.ncca.ie/en/Curriculum_and_Assessment/Post-Primary_Education/Senior_Cycle/Overview-of-Senior-Cycle/Transition_Units</u>.

² See <u>www.pdst.ie/node/4226.</u>

mathematics) are also provided, although teaching approaches may differ from those typically used in other grade levels. The extra year also provides an opportunity, in the absence of high-stakes exams, to explore familiar subjects in novel ways and to introduce students to new areas of study. Examples of Transition Year innovations include novel approaches to the teaching of mathematics and science (Carter & Ó Cairbre, 2011; Smith & Matthews, 2000) and the introduction of a module on Chinese language and culture (*Irish Times*, 4 May 2012).

In addition to these classroom-based activities, students may experience overnight or weekend trips, school exchanges, outside speakers brought in to address students, community service, musicals, art projects, and spells of unpaid work experience in a real workplace. Participation in 'real world' and cultural activities such as these are central to students' learning in TY, not least by helping to reinforce the reality that in many circumstances the best course of action to take, or the merit of a particular suggestion, is a matter of qualitative judgement which may differ between individuals. Transition Year activities should provide students with opportunities to learn how to make these judgements in a variety of formal and informal scenarios. Jeffers (2015) provides in-depth and accessible examples of how teachers approach these issues in TY through topics as diverse as science, music and drama, history, business, volunteering, community care, Irish, technology, development education, mathematics, and local studies.

With this range of novel methods and activities, TY is intended to act as a bridge from the relatively passive academic environment of the Junior Certificate to the more selfdirected learning that is expected of successful Leaving Certificate students (and for those who carry on to further study, successful third-level students). The stimulation of the experiences – which would not be on offer if participants had opted to carry on immediately with the conventional school programme – is explicitly aimed at expanding students' horizons, and in so doing promoting personal growth and maturity. It is worth considering here the thinking of Richard Burke, the Minister for Education responsible for introducing Transition Year in 1974:

Because of the growing pressures on students for high grades and competitive success, educational systems are becoming, increasingly, academic treadmills. Increasingly, too, because of these pressures the school is losing contact with life outside and the student has little or no opportunity 'to stand and stare', to discover the kind of person he is, the kind of society he will be living in and, in due course, contributing to, its shortcomings and its good points. The suggestion was made that perhaps somewhere in the middle of the course we might stop the treadmill and release the students from the educational pressures for one year so that they could devote time to personal development and community service.

(Burke, 1974; cited in Jeffers, 2007a)

By 'stopping the treadmill' in this manner, Burke saw Transition Year as a way of creating a more holistic schooling experience for Irish adolescents. In giving students a chance to step back from the day-to-day grind, he regarded TY as "the pivot by which junior cycle moves into senior cycle" (Burke, 2015). This desire to balance the academic emphases of Irish schools with a programme largely devoted to students' personal development resonates with O'Brien's (2008) call for "an holistic approach to the development of students' competencies and to their learning" (p. 179). A genuinely holistic education – incorporating social and personal competencies in a supportive school environment – is key to fostering wellbeing, and has broader social implications as students move from a passive role as absorbers of information to a greater readiness for active participation in society (Cohen, 2006; Coleman, 1972; O'Brien, 2008; cf. NCCA, 2003). Understanding the contribution of the Transition Year programme to preparing adolescents for adult life is necessary for informed educational policy domestically, and would provide a unique contribution to the broader psychoeducational literature.

1.1.2 Development of Transition Year

Transition Year was introduced as a pilot scheme in three schools in September 1974, with 16 schools enrolled by the 1977/78 academic year. Teething problems at this stage centred around uncertainty over how best to balance the vocational, social, and academic aspects of the curriculum, and over the appropriate level of emphasis to place on core examination subjects (English, Irish, and mathematics) throughout the Transition Year (Egan & O'Reilly, 1979). These criticisms were tempered with early recognition of the benefits of the pilot programme, with teachers and students alike perceiving improved student-teacher relations, positive attitudes towards school, broader conceptions of the world outside school, better knowledge of future career possibilities, and increased self-awareness and social confidence among participating students.

The tensions between the 'functional' and 'holistic' perspectives highlighted by Egan and O'Reilly (1979) – favouring a traditional education over five years versus six years of education including a Transition Year to 'stand and stare' – remain to the present day. A common concern expressed by Junior Certificate students, and their parents, is the fear that they might fall out of the habit of studying if they opt to take part in TY and would consequently struggle to catch up in preparing for the Leaving Certificate (Jeffers, 2007a; Smyth et al., 2004). Wroe, writing in the ASTT's *Teacher's Handbook* (1994), counters these fears by pointing out that the ethos of TY is based around students learning to learn for themselves, such that participating students should emerge from their completed Transition Year "more confident and better able to cope with the demands of the Leaving Certificate programme" (p. 18).

Jeffers (2004) makes the same point, highlighting confidence, improved study skills, and an increased capacity for self-directed learning as expected outcomes of Transition Year participation. The possession of competent study skills such as those expected of TY students – time management, use of appropriate information resources, and productive communication with teachers – has been shown to predict academic performance and retention rates among third-level students (Robbins et al., 2004). Le Métais (2003b; OECD, 2005) also identifies these metacognitive, interpersonal, and problem-solving competencies as being key skills for entry to adult and working life. Conversely, Putwain (2008) shows that the lack of such skills can be a major source of assessment-related anxiety for learners. These studies, and others like them, serve to validate Albert Bandura's (1993, p. 20) assertion that one of the "major goal[s] of formal education should be to equip students with the intellectual tools, self-beliefs, and self-regulatory capabilities to educate themselves throughout their lifespan [because] these personal resources enable individuals to gain new knowledge and to cultivate skills either for their own sake or to better their lives." Similar principles are recognised and affirmed by the TY Guidelines (Dept. of Education, 1993).

The Government's decision, in 2009, to abolish the ≤ 100 per capita grant for Transition Year students removed a key financial support for schools offering the programme. The grant was subsequently re-introduced for the 2010/11 school year at the lower rate of ≤ 95 per student (F. Dunne, Joint Managerial Body, personal communication, 25 November 2012). In September 2013, in response to a parliamentary question from Jonathan O'Brien, T.D., Minister Ruairí Quinn put the incremental cost of the TY programme at approximately ≤ 111.7 million (www.kildarestreet.com/wrans, 18 September 2013). This figure comprised ≤ 2.7 million in direct grants to schools, and ≤ 109 million arising from 1700 whole-time equivalent teaching posts.

Nonetheless, with general staffing reductions and other cuts to the education sector in recent Budgets, principals and school coordinators seeking to run an effective Transition Year are under increasing pressure to deliver more with less. Direct approaches to students' families for financial contributions throughout the year are common (Irish Second-level Students' Union, 2014). School principals (ASTI, 2012) report that these constraints are beginning to affect provision of the programme. Some of the responses to financial pressures reported by the surveyed principals include reductions in the breadth of modules on offer to TY students, increases in class sizes, and limits on the number of students allowed to take part in the extra year.

These pressures, coupled with the view in some quarters that Transition Year represents a luxury for the middle-classes (*Irish Independent*, 14 January 2009) and should therefore be a potential target for funding reductions in future Budgets, highlight the need for reliable data on the role that TY may play in supporting students' psychological and social development. Moreover, the claim by Seligman and colleagues (2009) that "parents, educators and politicians are often concerned that programmes will waste money or (worse) lower students' academic achievement by diverting time and money away from academic subjects" applies just as much to any discussion of Transition Year as to the (largely American-based) wellbeing initiatives to which their statement refers.

Recent commentary has highlighted the danger posed to the broad holistic principles of the Irish curriculum by narrower, industry-orientated and utilitarian approaches to education (Ó Breacháin & O'Toole, 2013). In particular, the publication of *The National Strategy to Improve Literacy and Numeracy among Children and Young People, 2011–2020* (DES, 2011) raises questions over the extent to which 'softer' skills, including social and creative development, are considered a matter of importance by the Irish Government. In outlining steps aimed at improving student performance in tests of reading and mathematics, the *Strategy* explicitly prioritises the "core skills of literacy and numeracy" (p. 14) over other "desirable but ultimately less important activities" (p. 15) in the classroom – potentially undermining the role that teachers, and the education system, could be expected to play in students' social and personal development.

A former government minister provides an example of the utilitarian viewpoint in a high-profile opinion piece (*Irish Times*, 14 February 2012) in which the abolition of Transition Year was advocated, as a cost-saving measure, as one change that should be made in order to "integrate the needs of the economy into Irish education". Other public commentaries (e.g., *Irish Times*, 20 December 2011; *Irish Times*, 19 March 2012) have described the programme as "pointless" because of a perceived lack of practical work skills arising from participation, and as a luxury that can no longer be justified during a time of economic difficulty. This instrumentalist perspective regards the qualification function of education – providing

students with the knowledge or skills to "do something" in particular – and the attainment of high grades in examinations as paramount (Biesta, 2009; Mansell, 2010). To some extent this can be seen as reflecting the "traditional divide between rational and emotional aspects of life" (O'Brien, 2008, p. 179) in Western education.

The contrasting holistic perspective represents the view that education is something more than preparation for the workforce. In addition to matters of qualification, this view gives considerable regard to the subjectification function of education (Biesta, 2009) which refers to the development of the individual (for example, by fostering autonomy among students). With particular regard to Irish education policy, it is exemplified by two documents. The first, a Government White Paper on education (Dept. of Education, 1995), describes Transition Year as educating students for "the demands and pleasures of life, work, sport and leisure" (p. 53). The inclusion of "life", sport and leisure as relevant topics for consideration alongside work are noteworthy here. So, too, is the recognition that a formal education might be expected to prepare students for the pleasures of life after school, as well as the challenges. This holistic view is made explicit elsewhere in the document: "the fundamental aim of education [is] to serve individual, social and economic well-being and to enhance quality of life" (p. 7).

Preparing students for future economic productivity is seen here as an important aim of education, but not an over-riding one. A paper published by the National Council for Curriculum and Assessment (NCCA, 2011) considers calls from business leaders, in light of the global and Irish economic downturns, for a greater focus in school on preparing students for the workforce. The NCCA responded to these demands in emphatic fashion, stating that "innovation is not just about the economy and schools are not only to serve the economy but to enable children become the people they have the potential to be" (p. 3). Coming from the organisation with responsibility for advising the Minister on issues of curriculum and assessment, this statement suggests a reluctance at the highest levels to re-frame education solely as training for the workplace. More recently, a public consultation held by the NCCA underlined the continuing broad public support for a holistic educational perspective (Fitzpatrick, Twohig & Morgan, 2014).

Despite some criticism of Transition Year in the media, then, it seems reasonable to infer some level of continued support at government level for promoting personal development within the education system. Of course, alongside developmental aims, Transition Year is also intended to help students to prepare for the world of work and for future careers. Although not an explicit focus of this thesis, work experience and the associated learning represents a distinctive and memorable aspect of the TY experience for most students. Therefore, this aspect of the programme is discussed next.

1.2 Work experience

Although vocationally-oriented alternatives to the established Leaving Certificate examination (such as the Leaving Certificate Vocational Programme and the Leaving Certificate Applied) are available, Irish secondary education as experienced by most students is generally oriented towards learning with an eye on further education more than to the practical applications of schoolwork to a working environment (McCoy & Smyth, 2004; Tovey & Share, 2003). This means that, for many students, there is little formal interaction between their school life and the working world. Greater access to work experience placements has been explicitly identified by second-level students as something that they believe would improve their school experience (Irish Second-level Students' Union, 2014; Smyth et al., 2011).

It is therefore noteworthy that the Department of Education's guidelines for implementing Transition Year stress that TY should include an active orientation towards the world of work (Dept. of Education, 1993, 1996), and the work experience component has indeed become a central feature of the programme. It usually involves students taking at least one unpaid placement in a real working environment (with two different workplace settings over the course of the school year being a common arrangement), performing tasks as directed under the supervision of their employers. These placements normally take one of two broad forms – either one day a week over the duration of a school term, or for a shorter but continuous block of time (e.g., one full week). The precise format of work placements can vary by school, at the discretion of the Transition Year coordinator and depending on the availability of local opportunities for placement.

1.2.1 Vocationalism in Transition Year – then and now

In historical terms, the Transition Year Option (as it was then designated) was one of a number of transition, or vocation-oriented, education programmes that were made available in Irish schools throughout the 1970s and 1980s (Kellaghan & Lewis, 1991; Lewis & Kellaghan, 1987). As well as Transition Year, these options included pre-employment courses, Vocational Preparation and Training (VPT) programmes, and a series of European Community-funded curriculum development programmes.

Kellaghan and Lewis (1991) note that each of these initiatives were targeted towards students who were at risk of disadvantage or would have poorer employment prospects after leaving school, with the exception of the Transition Year. Egan and O'Reilly's (1979) evaluation makes little reference to the issue of socioeconomic disadvantage among the 16 schools that were providing a Transition Year at that time (for small numbers of students, in most cases). They do, however, note that programme participants included both early school leavers, for whom TY represented an intentional final year of post-primary education, and students who would progress towards the senior cycle.

Transition Year was conceived of as providing a broadly-based educational experience that incorporated an orientation towards the world of work (including work experience), but in practice it was aimed from an early stage at students who intended to progress to the Leaving Certificate. For example, in the 1986/87 school year, 681 students entered the post-primary senior cycle after completing Transition Year while only 28 students transferred to a vocational or technical training course after TY (Kellaghan & Lewis, 1991). In contrast, the alternative transition programmes that were available at the time, such as VPT and pre-employment courses, were designed for early school leavers and other young people who lacked the qualifications and skills to enter the world of work immediately. These programmes may therefore have been seen as more attractive options than Transition Year in schools where greater numbers of students were at risk of leaving school early without suitable qualifications.

At present, it remains the case that schools with higher intakes of socioeconomicallydisadvantaged students are less likely to provide the programme (Clerkin, 2013; Jeffers, 2002; Smyth et al., 2004). Among the reasons reported for lower provision are concerns expressed by teachers about the potential for increased rates of early school leaving in schools where retention rates are already low and scepticism from parents about the value of participation in the extra year, as well as simple lack of demand from students. In some cases, particularly in smaller schools, Transition Year is seen by teachers as an alternative to the Leaving Certificate Applied (LCA), with the latter regarded as being more suitable than Transition Year for students to whom the established Leaving Certificate is not as well-suited. In these instances, with limited resources and small enrolment sizes, an LCA programme may be provided *instead of* a Transition Year.

1.2.2 Benefits and challenges of work experience placements

Early programme developers took the view that a practical taste of working life, as described above, was necessary to allow students to contextualise and put into practice the information they were learning in class (Harris, 1982). Wyn (2009) comments that "students preparing for life and work could do no better than to have the opportunity of working, within the structure of school, as a precursor to other world-based structures, such as they will later experience" (p. 52). Putting this belief into practice, the work experience component of Transition Year is intended to provide students with an understanding of the world of work, opportunities to take on responsibility, experience of working with adults, generalisable and self-management skills (e.g., time management), and social skills and awareness (ASTI, 1993, 1994; Dept. of Education, 1993; cf. Zimmer-Gembeck & Mortimer, 2006).

Kellaghan and Lewis (1991) note that the opportunity to be treated as a responsible adult is valued by students, with the social interactions of the workplace often regarded as more important than learning any particular job-specific skills. A key point is that work experience enables students to explore and test their assumptions about the job market as they gain a taste of the day-to-day tasks of a particular occupation. Nonetheless, some traditional gender- and social class-based expectations are evident in the variety of workplaces chosen by Transition Year students (Jeffers, 2012). For example, boys are more inclined to seek experience in the automotive industry and girls are more likely to work in the hair and beauty sector.

The insights gained while on work experience can lead the student to realise that a seemingly attractive job may not match their expectations, or that they are interested in working in an area they had not previously considered (Clerkin, 2015; McCoy, Byrne, O'Connell, Kelly & Doherty, 2010; McCoy, Smyth, Darmody & Dunne, 2006). As well as clarifying thoughts on (or eliminating) potential future careers, the experience is reported to have a positive effect on students' attitudes to work and school, and to help students achieve a more informed subject choice for the Leaving Certificate and third-level education (Harris, 1982; Moynihan, 2013; Smyth et al., 2004, 2011; Watts, Jamieson & Miller, 1989). Indeed, students who engage in career-related discussions with teachers in school, as TY participants are expected to in conjunction with their work placement, are more likely to endorse higher educational aspirations (Schuchart, 2013). This may be related to suggestions that students' work experience can help to foster increased motivation on returning to school, either because of a newfound certainty about their career aspirations or due to the harsher realisation that they need to work harder to give themselves options after school (Moynihan,

2013). Both types of occupational exploration – the *in-depth* experience of a specific role while on work placement, and the *in-breadth* exploration of career options more generally – are crucial to students' career-related decision-making (Dietrich, Parker & Salmela-Aro, 2012).

Work placements can highlight disparities between the types of skills that employers are looking for, both generally and in their specific field, and the types of skills that students think employers are looking for (Krahn, Lowe & Lehmann, 2002). The experience gained in Transition Year, both on placement and during in-school preparation for placements, can be valuable in this regard – for example, with students given the opportunity to practice making formal phone calls and written correspondence (Jeffers, 2015). Work experience placements in TY are generally regarded and reported as being a positive experience for students. However, the location of these placements, the manner in which they are secured, and the extent to which students are involved in meaningful work while on placement varies widely between schools and between students within schools (Irish Second-level Students' Union, 2014; Jeffers, 2012; Kamp et al., 2014; Moynihan, 2013). The geographic location of schools can contribute to this variation. Students in urban areas are likely to be able to explore placements in a wider variety of industries and businesses but less likely, for example, to have the opportunity to seek a placement in an agricultural setting. Accessibility to appropriate public transport in such cases can also pose a challenge.

In particular, issues of social capital (Fuller, 2014) may lead to certain experiences and working environments being made more accessible to students from socioeconomically advantaged backgrounds than to those from disadvantaged backgrounds – consider, for example, differences in students' parents' occupations, and their social and business networks. This may be of some concern given the tendency for students taking Transition Year to come from more advantaged backgrounds in the first place (Smyth et al., 2004; see also Chapter 4). In addition, some teachers have reported difficulty in motivating students who already have part-time jobs to explore other career opportunities through work experience, rather than simply doing more of the same part-time work (Smyth et al., 2004). Again, this issue is reported to be most prominent among more disadvantaged students (Smyth et al., 2004).

With regard to the issue of extracurricular paid work during Transition Year, McCoy and Smyth (2004) found that students who had engaged in paid work while in TY were more likely than TY non-participants to also be in part-time employment in Fifth and Sixth Year. Conversely, students who had *not* been employed during TY were less likely than non-

participants to work during the two subsequent years. Paid part-time employment, generally, was more common among the senior cycle students in their survey than at junior cycle (McCoy & Smyth, 2004). Morgan (2000) found a similar pattern with a Dublin-based sample. However, as noted by Morgan (2000), the then-buoyant economy was a key factor in supporting casual employment in the service industry (shops, pubs, restaurants, babysitting) which provided most of the employment to those surveyed in both studies. The availability of such work for second-level students is likely to have declined in recent years (Kamp et al., 2014). Although some part-time employment may have some benefits, working more than a few hours per week is negatively associated with academic achievement (McCoy & Smyth, 2004, 2007; Zimmer-Gembeck & Mortimer, 2006). This association may be an effect of paid employment displacing schoolwork from students' free time, of increased tiredness and distraction leading to reduced cognitive engagement in school, or an example of self-selection, whereby students who are less inclined towards school or schoolwork begin to opt into the workforce earlier than their peers. In many cases it likely reflects a combination of these factors.

In any case, research from Canada and Australia suggests that workplace learning that is associated with school (such as work placements and related classroom discussions preand post-placement) is regarded differently by students than their own 'external' part-time work. For example, part-time work tends to be associated primarily with earning additional or disposable income, and with facilitating a social life. In contrast, school-based work experience is more strongly associated with vocational exploration, consideration of a future career, and more general experience of what a workplace is like (Krahn et al., 2002; Stokes & Wyn, 2007). Both types of experience in the workplace are considered by students to facilitate the development of 'people skills' and the acquisition of organisational skills.

1.3 Provision and uptake of Transition Year (1992-2015)

In considering the possible impact of TY on the development of Irish adolescents, it is instructive to gain a sense of the reach of the programme, how many students it affects, and even whether the availability of the programme differs in various circumstances. To that end, this section describes the provision and uptake of Transition Year over the last two decades, covering the period from before the mainstreaming of the programme in 1994/95 to the latest available figures. *Provision* refers to the school-level availability of a TY programme in a given year. *Uptake* refers to the extent of student-level participation in a provided TY programme.

The Department of Education and Skills does not collect information on whether TY is offered on a compulsory or optional basis (H. Maxwell, DES, personal communication, 28 January 2016), so the figures given below include all recorded Transition Year programmes. The data presented come from annual enrolment figures supplied by the Department of Education and Skills. Twenty-three files were provided, corresponding to each of the academic years from 1992/93 to 2014/15. All of the following calculations draw directly on the information in these enrolment figures. They include school and student numbers relating to Transition Year, student numbers for other grade levels (e.g., Third Year), and contextual information such as school type.

The numbers of participating schools and students for each year are shown in Table 1.1. As shown, a large increase in uptake of the programme occurred between the 1993/94 and 1994/95 academic years. This increase accompanied the mainstreaming of Transition Year as part of a three-year senior cycle and its re-designation as the Transition Year Programme (formerly the Transition Year Option). Mainstreaming was accompanied by the establishment of regional support teams that offered ideas, guidance, and workshops to assist with planning, particularly for schools that had not previously offered a Transition Year (Jeffers, 2007a; Lewis & McMahon, 1996). However, ongoing in-service opportunities for teachers involved with Transition Year classes have been relatively limited since this initial support (Jeffers, 2007a; Smyth et al., 2004).

In overall terms, the number of schools offering a Transition Year more than trebled as a result of the mainstreaming process. Provision jumped from 144 schools in 1993/94 (19% of all second-level schools) to 451 schools (60%) in 1994/95, and has steadily increased for most of the twenty years since then. As of 2014/15, a Transition Year programme is available in the vast majority of schools (89%).

As well as school-level provision, it is useful to examine the extent of Transition Year uptake for each cohort. The eligible students in any given year are defined as the previous year's Junior Certificate cohort, including those students participating in the Junior Certificate Schools Programme (JCSP).³

³ The JCSP is an alternative to the established Junior Certificate curriculum, and is aimed at making the junior cycle more engaging to students who are at risk of early school leaving. In 2014/15, almost 5000 students were enrolled in the JCSP.

The increased provision that accompanied mainstreaming in the 1990s corresponded with a large increase in participating student numbers. TY participation more than doubled, from 13% of the eligible cohort pre-mainstreaming to 31% the following year. Mirroring increases in school-level provision, student participation rates have generally continued to increase in the interim, and particularly so since 2001/02. The first time that more than half of a cohort took part in TY was in 2008/09 (51%). Since then, participation has continued to increase by 6-7% year-on-year. The most recent data show that almost two-thirds of the cohort (65%) – nearly 40,000 students – enrolled in TY in 2014/15. By this measure, the expansion of the programme appears to be reaching a point where a student's choice to participate is more a question of whether or not to opt out of TY, rather than opting in.

	Sch	nools ^a	Students		
	N	%	N	% ^b	
1992/93	147	19.2	8192	-	
1993/94	144	19.0	8493	12.7	
1994/95	451	60.1	21046	30.7	
1995/96	499	67.1	24116	35.0	
1996/97	502	67.6	24219	35.3	
1997/98	510	68.9	24565	36.5	
1998/99	502	68.2	23642	36.0	
1999/00	496	67.9	22756	36.3	
2000/01	507	69.6	23247	38.0	
2001/02	498	69.1	22772	37.8	
2002/03	499	69.6	23298	38.8	
2003/04	497	69.7	23767	40.3	
2004/05	521	73.6	24796	44.0	
2005/06	526	74.2	25806	45.9	
2006/07	523	74.5	27075	47.1	
2007/08	532	76.5	27759	48.5	
2008/09	552	79.5	28347	50.7	
2009/10	555	79.6	28635	51.8	
2010/11	574	82.1	30535	54.5	
2011/12	582	83.9	32673	57.5	
2012/13	599	86.7	34711	58.9	
2013/14	608	88.1	37012	61.7	
2014/15	614	89.1	39347	65.0	

Table 1.1: School- and student-level participation rates in Transition Year, 1992-2015

^a Schools catering exclusively for adult learners (e.g., Colleges of Further Education) are excluded from these figures. Schools are counted if they enrolled junior cycle students the previous year. ^b TY students as a percentage of the previous year's Junior Certificate cohort (including JCSP).

The effect of mainstreaming on the availability of Transition Year is particularly apparent in vocational and community/comprehensive schools (Table 1.2). For example, before

mainstreaming, about one-quarter of secondary schools, but fewer than one-in-ten vocational or community/comprehensive schools, provided TY. In the first year following mainstreaming, secondary schools were about 2.6 times more likely to offer TY (increasing from 26% to 68%). In the same year, students in vocational schools or community/comprehensive schools were approximately six times more likely to have access to a TY programme, with provision increasing from 8% to 44% in vocational schools and from 10% to 61% in community/comprehensive schools.

Since this large relative increase, provision rates in community/comprehensive schools have caught up with those in secondary schools, but vocational schools have been slower to embrace the programme. The most recent figures show that very few schools in the secondary (6%) and community/comprehensive (7%) sectors do not now offer Transition Year. Provision in the vocational sector is more widespread than in previous years, but the programme remains unavailable to students in 27% of schools.

Tuble 1.2. Transition fear provision and aptake , by school type, for science years								
	Secondary		Vocational		Comm. / Comp.			
	% schools	% students	% schools	% students	% schools	% students		
1993/94	26	18	8	5	10	4		
1994/95	68	36	44	25	61	22		
1999/00	80	43	43	25	72	30		
2004/05	83	51	52	30	76	37		
2010/11	91	61	63	43	88	49		
2014/15	94	71	73	55	93	59		

Table 1.2: Transition Year provision^a and uptake^b, by school type, for selected years

^a Schools offering TY as a percentage of all schools in that sector. Schools catering exclusively for adult learners (e.g., Colleges of Further Education) are excluded.

^b TY students as a percentage of the previous year's Junior Certificate cohort (including JCSP).

With the broadening of the programme in 1993/94, student participation rates increased substantially in all three school types. Mirroring the improved school-level provision of the programme, increases in student participation in TY were proportionally greater in vocational and community/comprehensive schools at this time. Student uptake of the programme is highest in secondary schools. In 2014/15, for example, 71% of the eligible secondary cohort enrolled in TY, compared to 59% of students in community/ comprehensive schools and 55% in the vocational sector.

1.4 Previous research on Transition Year

As described in the previous section, thousands of students take part in TY annually and have been doing so for many years. Nonetheless, the programme has historically been

relatively under-researched and under-evaluated (ASTI, 1993; NCCA, 2002; Clerkin, 2012), particularly in terms of student outcomes. Since the early 2000s, however, two major sources of information on the programme have been made available.

The first report draws on a postal survey of school principals and detailed case studies of twelve schools to describe the provision and content of the programme and the views of stakeholders (Smyth et al., 2004). It also provides quantitative information on some of the characteristics of the students who take part in the programme, such as gender, socioeconomic background, and academic performance. It should be noted that the latter data are drawn from an earlier (1994) student database, and therefore describe the characteristics of students from just before the Transition Year programme was mainstreamed.⁴ The characteristics of the relatively small group of schools and students who chose to take part in TY at that time may differ in some respects from the broader group of schools and students who participate now.

The second major source of information comes from the work of Jeffers (2007a, 2010, 2011, 2015), who has reported detailed observations from six case study schools that exhibit "distinctive good practice in their TY programmes" (2007a, p. 31). Jeffers' findings – of students', teachers', and parents' attitudes to TY, as well as schools' organisation and implementation of the programme – are based on extensive interviews with school principals and Transition Year coordinators, focus groups with students and parents, and questionnaire data returned from more than 100 teachers across the six selected schools.

Although the work of Smyth et al. and Jeffers represent the most wide-ranging accounts of Transition Year to date, additional information on specific aspects of the programme can be drawn from other sources. These include, most notably, a comparison of the academic performance of students who do and do not take part in Transition Year (Millar & Kelly, 1999). Millar and Kelly's study is based on a longitudinal comparison of all students who took the Junior Certificate in 1994 and subsequently sat the Leaving Certificate in 1996, in the case of TY non-participants, or 1997 for TY participants.

The existing literature suggests that students who choose to partake in Transition Year are – on average – younger than those who do not, and have higher educational aspirations. They tend to come from more socioeconomically-advantaged families, with

⁴ Data collection occurred between December 1993 and March 1994 (Hannan, Smyth, McCullagh, O'Leary, & McMahon, 1996).

students from a higher professional background more than twice as likely to take part as students from semi-skilled or unskilled backgrounds (Smyth et al., 2004). TY participants are also more likely than non-participants to have at least one parent with a third-level qualification (Smyth et al., 2004). To varying degrees between schools, teachers may also play a role in encouraging or discouraging particular students to take part in Transition Year. For example, Third Year students who are seen to be at risk of early school leaving, or students who are described as having behavioural problems or as being disruptive, may be 'steered away' from enrolling in TY (Smyth et al., 2004).

Post-Transition Year, Smyth et al. (2004) found that participants performed better in the Leaving Certificate than non-participants, after controlling for social background, parental education, and prior (Junior Certificate) performance. Millar and Kelly's (1999) longitudinal study put the LCE advantage to Transition Year participants at 26 CAO⁵ points, after controlling for gender, school type and JCE performance. With more CAO points, on average, students who take Transition Year therefore tend to have an advantage over their peers in applying for high-demand third-level options.

Millar and Kelly (1999) also note as one of the most "striking features" (p. xxv) of their data that students in schools that are designated as disadvantaged, particularly male students, make relative gains in achievement after taking part in Transition Year. That is, the average gap in performance compared to students in non-designated schools narrows between Junior and Leaving Certificate among those students who take TY, while it widens from Junior to Leaving Certificate among those who do not take part in Transition Year. However, they lacked the data to identify specific reasons for the achievement gap. Similarly, Smyth et al. (2004) reported that Transition Year may have a stronger positive impact on Leaving Certificate performance among lower-performing (Junior Certificate) students, thus closing the achievement gap to a degree. This effect was restricted to students who chose to take part in TY, being less apparent in situations where TY participation was compulsory.

One possible factor in these findings is the tendency for mathematics classes in Transition Year to be more structured in DEIS (disadvantaged) schools than in non-DEIS schools (Moran, Perkins, Cosgrove & Shiel, 2013). This could provide a relative boost to TY students' mathematics achievement in DEIS schools, compared to TY students in other

⁵ Central Applications Office. CAO points are calculated from Leaving Certificate results, with more points conferring eligibility for a wider range of third-level courses.

schools. At the same time, teachers in DEIS schools are more likely to use TY to begin covering Leaving Certificate material (Moran et al., 2013), potentially widening the gap *within* DEIS schools between TY and non-TY students. A notable limitation of Millar and Kelly's (1999) study was the absence of more detailed information on the students involved (for example, student-level indicators of the home environment or socioeconomic disadvantage), which would allow for a more nuanced interpretation of the association between examination performance and Transition Year participation.

Another reason often cited for the advantage in LCE performance is TY participants' greater maturity, with school staff and students interviewed by Smyth et al. (2004) and Jeffers (2007a) suggesting that students had gained noticeably from the extra year. (Previous research has sometimes tended to refer to "maturity", following interviews with stakeholders, with limited reference to specific facets of that maturity.) However, the specific role that broader conceptions of personal development arising from Transition Year participation may play in subsequent Leaving Certificate achievement remains unclear (Jeffers, 2010; Millar & Kelly, 1999).

Work experience, as described above, may be important to perceptions of maturity. Real-life work experience such as the placements in TY can help students to acquire an understanding of the world of work generally, and to learn specific work- and occupationrelated skills with relevance beyond their school life (Creed, Muller & Patton, 2003; Wyn, 2009). The results of the PISA 2012 problem-solving assessment are of note in this regard. In Ireland, students in Transition Year performed significantly better on computer-based problem-solving tasks, relative to their performance on the accompanying maths, science and reading assessments, than students at other grade levels (Perkins & Shiel, 2014). That is, while TY students outperformed students at every other grade level in the more traditional maths, science and reading assessments (Perkins, Shiel, Merriman, Cosgrove & Moran, 2013), the problem-solving assessment showed a greater-than-expected advantage to TY students on problem-solving tasks, even while taking their superior performance in the other assessment domains and generally higher socioeconomic status (SES) into account. As the problem-solving tasks were designed to reflect 'real life' challenges, such as navigating traffic conditions and operating unfamiliar electrical appliances, TY students' greater familiarity with real workplaces and their greater involvement in organising and managing projects may be a factor in explaining these results.

Furthermore, Kellaghan and Lewis (1991) point to the development of interpersonal skills, including self-confidence and an improved ability to relate to teachers and other adults,

as a result of work experience such as that undertaken by students as part of their TY. This dynamic, once established, carries through to classes in the two years of the Leaving Certificate proper, with teachers reporting generally better relationships with former Transition Year participants than with those students who came to senior classes directly from the junior cycle (Jeffers, 2007a; Smyth et al., 2004; Transition Year Curriculum Support Service, 2000). It is recognised by students, parents, and teachers alike that the space provided by TY between the two high-stakes examination cycles provides a unique opportunity for students to develop more personal, co-operative relationships with teachers and peers in the absence of exam-related pressure (Irish Second-level Students' Union, 2014; Jeffers, 2007a).

The classroom benefits of a more personal relationship between students and teachers following the shared experiences of TY are illustrated by a teacher's perspective (speaking to Jeffers, 2015): "what's important is that they see you can have fun and then get back to work" (p. 76). Respectful peer and student-teacher relationships of this type can, in turn, help to facilitate student engagement (Fredricks, Blumenfeld & Paris, 2004), more positive peer experiences (Dworkin, Larson & Hansen, 2003), school-related and social self-efficacy (Jerusalem & Hessling, 2009), an adaptive transition from school to work (Phillips, Blustein, Jobin-Davis & Finkelberg White, 2002), and predict positive changes in psychological wellbeing, as measured by increased self-esteem and decreased depressive symptoms (Reddy, Rhodes & Mulhall, 2003). Generally speaking, practices that promote the development of supportive, mutually respectful teacher-student relationships appear to make a substantive contribution to students' wellbeing (Becker & Luthar, 2002; O'Brien, 2008). However, explicit measures of wellbeing, such as life satisfaction, have not featured strongly in previous research on Transition Year.

Finally, it has been reported that Fifth Year students who previously took part in TY report lower levels of social distance from various ethnic minorities (namely, black African immigrants, Eastern Europeans, Muslims, and Travellers) than their classmates who did not do Transition Year (Tormey & Gleeson, 2012). This finding, however, takes no account of students' socioeconomic status or their views with regard to minority groups prior to their participation (or non-participation) in Transition Year, so claims of the "positive effect of Transition Year" (p. 169) in ameliorating prejudices must be regarded as tentative in the absence of additional information. It is worth noting in this regard that no previously-published studies on Transition Year have explored uptake of the Transition Year

programme itself in terms of characteristics such as students' cultural backgrounds or the language of the home.

The reported benefits relating to participation in Transition Year appear to be more pronounced in schools where the programme is offered on an optional basis. In schools where participation in Transition Year is compulsory, some students tend to express more negative views of the programme. These criticisms most often relate to the difficulty of settling back into a 'normal' schoolwork and homework routine in Fifth Year, or to a feeling that TY was a waste of time when they would rather have finished school a year earlier (McCoy et al., 2010; Smyth & Calvert, 2011). In such cases, forced participation in the extra year may actually be counter-productive, posing a threat to students' continuing engagement in school life and academic work.

1.5 Transition Year in an international context

Given that the Transition Year programme's key aims are to promote students' social and personal development and to prepare them for participation in adult society (Dept. of Education, 1993), it is worth considering the wider context in which this innovative programme operates. Transition programmes and youth development programmes of various design are in operation in some other jurisdictions. However, the Irish Transition Year is unusual in that a full school year is set aside for the programme as opposed to, for example, delivering the programme in-school over two classes per month (e.g., Pitre, 2011, in the United States) or outside the school setting entirely. The unusual nature of the programme is illustrated by minor ambiguities over its classification in the International Standard Classification of Education hierarchy (Smyth, 2008).

Transition Year – as a 'non-academic' developmental year embedded in mainstream secondary education in Ireland – appears to have no direct equivalent in other national school systems (Le Métais, 2003a; Smyth et al., 2004).⁶ For example, some national systems incorporate an orientation year during which students choose an academic or vocational track for their future education (e.g., the French *seconde*), but these years lack the emphasis that the Transition Year guidelines place on providing students with space to develop in the

⁶ However, a recent development of interest is the piloting of a programme in South Korea based on the Irish Transition Year model (A. Fitzgerald, DES, personal communication, 11 May 2015; J. Lee, personal communication, 21 February 2016). A press release from the Department of Education and Skills can be viewed at <u>www.education.ie/en/Press-Events/Press-Releases/2013-Press-Releases/PR2013-10-29.html</u>.

absence of examinations and a centrally-prescribed curriculum. Elsewhere, the International Baccalaureate programme accords importance to education for global citizenship alongside its academic curriculum, but it is aimed primarily at "gifted", "advanced", and highly-motivated students (cf. Foust, Hertberg-Davis & Callahan, 2009; Taylor & Porath, 2006) rather than the general school-going population, as is the case with Transition Year.

The nearest equivalent in international terms may be the emphasis on youth development that is a feature of Year 9 (equivalent to Third Year) in some schools in Australia. In such cases, Year 9 students take part in activities designed to prepare them for life after school and to foster self-management skills and personal development, sometimes staying on dedicated offsite campuses in rural areas. The aims and characteristics of these programmes are similar to what we would recognise in TY. However, these activities do not represent a coherent programme or a standalone year in the mould of Transition Year, nor are they a widespread occurrence. Rather, they are organised independently, mostly by wealthy private schools, and students are taken away from more conventional classroom activities typically for only one term of the school year (although the duration varies widely between schools) (N. Wernert, Australian Council for Educational Research, personal communications, 25 January 2016 and 26 January 2016). For the remainder of the year – or for the full academic year in most schools – Year 9 students experience a more typical workload and academically-focused learning environment.

1.5.1 Transition Year as positive youth development

Despite the unusual nature of the programme, an attempt can be made to place Transition Year in context with non-school programmes operating with the same goals. An increasing emphasis on providing emotional and social support to adolescents in the US has led to the growth of programmes designed to facilitate positive youth development in recent decades (Catalano, Berglund, Ryan, Lonczak & Hawkins, 2004; Damon, 2004; Lerner et al., 2005; Small & Memmo, 2004). A common defining feature of these programmes is their focus on actively developing positive attributes rather than on seeking reductions in negative outcomes (e.g., depression, substance abuse, behavioural problems). A further feature is that they are often aimed at the general population and characterised as being of relevance to all young people, as opposed to a subgroup identified as experiencing particular difficulties.

Several complementary definitions have been provided, with youth development programmes described as those seeking "to build [adolescents'] abilities and competencies...by increasing participants' exposure to supportive and empowering

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environments where activities create multiple opportunities for a range of skill-building and horizon-expanding experiences" (Roth & Brooks-Gunn, 2003a, p. 94), or those aiming to promote positive attributes such as self-efficacy, self-determination, bonding, resilience, and social, emotional, cognitive and behavioural competencies, recognise participants' positive behaviour, and/or provide opportunities for prosocial involvement (Catalano et al., 2004). Durlak et al. (2007, p. 270) state simply that positive youth development "seeks to promote the variety of developmental competencies that young people need to become productive, contributing members of society."

The Transition Year programme is similarly focused on promoting positive competencies among young people with a view to preparing them for life and for active participation in society, as part of a balanced curriculum. Iindeed, the pilot phase of the initiative was categorised as a personal development programme in a contemporary review of Irish curricular developments (Crooks & McKernan, 1984). The value of offering the programme to all students and of devoting a full school year to this personal development – an unusual approach in international terms – is supported to some extent by the observation of Smyth et al. (2011) that "many students attributed the greatest change in their personal development [during their time in school] to their time in Transition Year" (p. 182).

The ability to adequately conceptualise and measure participant outcomes is frequently emphasised as a necessity for appropriate – and useful – evaluations of such programmes (Catalano et al., 2004; Kurtines, Ferrer-Wreder, Berman, Lorente, Silverman & Montgomery, 2008; Roth and Brooks-Gunn, 2003b). Going further than that, Moore, Lippman, and Brown (2004) consider the assessment of suitable *positive* indicators to be a key, and even necessary, feature of youth programme evaluation. They point to an over-reliance on negative indicators of child and adolescent wellbeing (such as depression or antisocial behaviour) in the extant literature, leading to a limited perspective on the full range of psychological, social, and behavioural development. Similarly, Pollard and Lee (2003) point to the over-reliance on negative indicators as a deficit in the existing literature base, particularly with regard to psychological indicators.

Generally speaking, greater commitment to the assessment of strengths and positive developmental outcomes is seen as being required to give a more complete picture of adolescent wellbeing than is available at present. Potential positive indicators suggested by various researchers include life satisfaction (Hawkins, Letcher, Sanson, Smart & Toumbourou, 2009; Park, 2004), psychosocial competencies (Hawkins et al., 2009) and selfefficacy beliefs (Vecchio, Gerbino, Pastorelli, Del Bove & Caprara, 2007). The breadth of potential socioemotional, health-related, behavioural, and educational outcomes and indicators is underlined by a recent compilation of research areas that includes an extensive list of measures (Moore et al., 2015).

Project K, run by the Graeme Dingle Foundation (formerly the Foundation for Youth Development) in New Zealand, provides an example of an evaluated programme outside the dominant US research context. Similarities with Transition Year can be seen in the target grade (Grade 10, mainly 14-15 year olds) and the stated goals of the programme, which include developing: students' motivation to pursue education and employment; confidence to set and achieve challenging goals; positive social relationships; and the ability to interact with adults to obtain support, with the aim of becoming contributing members of society (Graeme Dingle Foundation, 2016). Established in 1996, almost 4000 students have passed through the programme as of the end of 2015 (J. Moore, Graeme Dingle Foundation, personal communications, 16 March 2010 and 10 January 2016).

Despite their comparable goals, the programmes differ markedly in two important respects. First, while TY is available to most students around the country, Project K is implemented as an intervention. Students from participating year groups are selected for inclusion based on low scores on a self-efficacy screening questionnaire and teacher ratings. These are assumed to be the students who would benefit most from participation in Project K (Qiao & McNaught, 2007). Second, in contrast to TY's status as a school-based programme firmly embedded in the senior secondary cycle, Project K is offered to selected students (in the equivalent grade in New Zealand) out of school, taking in three separate modules over 14 months. These modules include a wilderness adventure (lasting three weeks), a community project (10 days) where participants apply the skills learnt on the wilderness challenge to a local community setting, and a one-to-one mentoring partnership (one year) with a trained adult who provides support and helps to establish future goals.

Evaluations of Project K have reported increases in academic, social and help-seeking self-efficacy among participants (Deane, Harré & Moore, 2009; Qiao & McNaught, 2007), as targeted by the programme developers. The authors of these studies highlight the implications of their findings for programme developers, and ensure that decisions on the development and future direction of Project K are informed by a suitable evidence base. Although Transition Year is a much more extensive (in terms of participant numbers) and well-established programme than Project K, thus far it has not been the subject of a similar evaluation of the role it may play in promoting personal and social development among participating students.

1.5.2 Transition Year as gap year

The similarities between Transition Year, as a break from academic pressure halfway through secondary education, and more traditional gap years (following the completion of secondary education) are also worth considering. As an integrated component of formal mainstream secondary education, TY may not, strictly speaking, qualify as a gap year. However, the similarities in students' motivation for taking the year, the range of experiences on offer, and the expected outcomes of participation suggest that some comparisons may usefully be made.

A gap year can be defined as a period of time taken out of education or work where "the key criteria is the 'time out' from the formal aspect of a longer term career trajectory" (Jones, 2004, p. 22), or taking a time-defined break from study. It can also be considered a "period providing a zone of relative safety from which young people can explore identity and roles and undertake the task of resolving goal uncertainty" (Parker, Thoemmes, Duineveld & Salmela-Aro, 2015, p. 324). Jones' (2004) review of the literature highlights the desire to take a break from education/work, to gain a broader perspective on life, and to gain personal life skills as being among the most common motivating factors prompting young people to seek gap years.

These definitions and ambitions resonate with the rationale for the Transition Year programme (Dept. of Education, 1993). The major difference from conventional gap years is that TY aims to provide students with an opportunity to address such concerns before, rather than after, leaving the secondary education system. It is of note in this regard that Schuchart (2013, p.40), discussing the German education system, makes a call that "transition programmes, including systematic counselling on further educational options, should be considered more seriously as important factors for school improvement."

Reflecting some parents' concerns that Transition Year participation might result in their child losing the habit of studying, Jones (2004) notes similar warnings with regard to gap years between secondary school and tertiary education among career advice publications. Martin (2010) directly addresses this point with a longitudinal study, finding that taking a gap year before entering university is associated with greater adaptive study behaviour (planning, task management, and persistence) amongst undergraduates. Based on these results, Martin (2010) suggests that taking a gap year may enable students to address deficits in these areas, thus yielding a more adaptive profile of academic motivation and behaviours. This is consistent with student self-reports and teacher views suggesting that TY participants are generally better-prepared, after their 'year out', for the rigours of the two-year Leaving Certificate cycle (Irish Second-level Students' Union, 2014; Jeffers, 2007a; Smyth et al., 2004). It may be that participation in Transition Year provides an opportunity to learn selfmanagement skills that get overlooked through the junior cycle and during the two years leading up to the Leaving Certificate, when passing examinations is the overwhelming focus for most students.

This section is not intended to present a comprehensive review of literature related to post-second-level gap years. Interested readers are referred to Heath (2007), Jones (2004), Curtis, Mlotkowski and Lumsden (2012), Crawford and Cribb (2012), and Coetzee and Bester (2009) for broader introductions to the area. In considering the concepts, motivations, factors and outcomes that are associated with gap year participation in these papers, correspondences and differences with the Transition Year programme should be borne in mind.

1.6 Contribution of this study

The provision of a full year of mainstream schooling dedicated largely to fostering students' personal development is, to date, a uniquely Irish innovation. As noted above, however, there are a number of limitations to the extant literature on the Transition Year programme. The current research seeks to inform the debate in three main ways, by providing for the first time (i) quantitative and (ii) longitudinal measurements of (iii) socioemotional outcomes.

1.6.1 Emphasis on quantitative measurements

A notable feature of previous research on Transition Year is that detailed findings have predominantly been based either on qualitative accounts of the outcomes of interest (interviews with students, teachers, or parents) or on specific, but not necessarily generalisable, case studies of particular schools (e.g., Jeffers, 2007a; Smyth et al., 2004). Concerns at the difficulty of evaluating the programme beyond "anecdotal evidence" have been expressed at a high level, with Doreen McMorris, an Assistant Chief Inspector at the Department of Education and Science, remarking that "the danger of the skills promoted in Transition Year is that they are very difficult to measure and, quite often, cannot be appreciated until many years after one leaves school" (Joint Oireachtas Committee on Education and Science, 25 March 2004). More generally, Durlak et al. (2007) note a similar problem with evaluations of positive youth development programmes in other jurisdictions, pointing out that only 24% of the reports included in their meta-analysis

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included quantitative measures that were intended to ascertain the effect of the interventions.

In response to these concerns, a largely quantitative approach to assessing students' personal development is taken in this study. The use of quantitative indicators is not intended to replace or ignore other methods of assessing students' development or the impact of TY, but instead represents a way of building effectively on the qualitative findings of previous studies. The selected indicators are introduced below (and in more detail in the next chapter). In addition to the quantitative outcome measures used here, self-generated responses describing their attitudes and experience of TY are provided by participating students, thereby giving some idea of the school context and the quality of the Transition Year programme as perceived by the students themselves. These contextual reports of students' Transition Year experiences will help to facilitate appropriate interpretation of the quantitatively-measured outcomes.

1.6.2 Emphasis on longitudinal participation

A recurring limitation, globally, of previous research on socioemotional development in adolescence has been the correlational nature of the studies upon which much of the literature is based (Lerner et al., 2006; Pollard & Lee, 2003). The data gathered in such studies, although useful, cannot allow for examination of causal or directional effects and thus constrain the inferences that may be drawn. For stronger inferences, longitudinal data including baseline measurements before exposure to an intervention, treatment, or programme – are required in order to assess patterns of change in students' development that may be associated with participation in the programme (Collins, 2006). Similarly, although important work has been done by a number of researchers in Ireland on Transition Year, the intended outcomes have not been evaluated longitudinally with reference to students' characteristics before entering Transition Year.

In this study, all of the outcome measures and contextual questions are administered to the same students on three occasions. The three waves of administration occur near the end of each academic year, spanning the period from Third Year to Fifth or Sixth Year. Collecting appropriately-spaced longitudinal data in this fashion yields a rich dataset that can facilitate appropriate comparison of the development of TY participants and their nonparticipating peers. In the absence of such data, the identification of strengths, weaknesses, and ambiguities in programmes such as the Transition Year becomes more difficult, meaning that decisions are made on the basis of incomplete information.

1.6.3 Emphasis on socioemotional outcomes

As noted above, previous assessments of the Transition Year programme have tended not to include explicit measurements of outcomes that could be described as central to the mission of the programme. Millar and Kelly (1999) compared the academic performance of TY participants and non-participants, but did not have information on the social, personal or self-regulatory characteristics of students that may have accounted for the differences they observed. In a similar vein, Smyth et al. (2004) were able to examine Leaving Certificate performance in association with TY participation, but note that the quantitative data in their evaluation are limited to academic measures. They conclude their report (pp. 228-9) by calling for a more explicit assessment of the "social and emotional development" that is the primary objective of Transition Year.

As a first step towards addressing this gap in the knowledge base, the current study draws on several discrete, but inter-related, strands of psychological and educational research indicators with which to examine the role of TY in Irish students' for development. Psychosocial or socioemotional development is the term used to describe an individual's psychological development in the context of social interactions and their functioning in social environments, such as at school or in the workplace. There is a substantial psychological literature on various aspects of psychosocial development in adolescence internationally (see Chapter 2) and, as a result, a number of well-validated scales for measuring these constructs are available. Several socioemotional outcomes are examined in this study: students' engagement with school; student-teacher relationships; social selfefficacy; personal responsibility (operationalised as work orientation and self-reliance); subjective age; and life and school satisfaction. The selected outcomes emphasise the presence of positive indicators of Irish students' personal competencies and maturity (such as student engagement and life satisfaction) rather than the absence of negative indicators (such as antisocial behaviour or substance abuse).

These particular indicators have been selected for several reasons. They reflect the ideas expressed in the Transition Year guidelines (Dept. of Education, 1993) that speak of providing students with an opportunity for social and personal development and preparation for participation in society. They also fit with the attributes identified in the National Council for Curriculum and Assessment's (2003) vision for senior cycle education in Ireland, which is characterised by high levels of engagement, autonomous learning, and mutually-respectful and supportive relationships between students and school staff. In addition, they represent constructs that have previously been identified in interviews with students, teachers

and parents as being perceived to be associated with students' participation in the extra year (Jeffers, 2007a; Smyth et al., 2004).

Finally, the inclusion of these indicators functions as a response to international calls (Galambos & Leadbeater, 2000; Reschly, Huebner, Appleton & Antaramian, 2008) for more comprehensive assessment of positive psychosocial outcomes, competencies, and wellbeing in adolescence – both in their own right and through their association with other indicators of positive development. Ben-Arieh's (2009) discussion of the distinction between well-being (emphasising the characteristics of children and young people at present) and well-becoming (with a greater focus on eventual outcomes in adulthood) makes explicit the difficulty of maintaining a belief in the rights of children without supporting consideration for their current wellbeing, competencies, and opinions. In Ireland, the establishment of the Department of Children and Youth Affairs in 2011 and the publication of the National Children's Strategy (Hanafin, Brooks, Roche & Meaney, 2012) make such considerations especially timely. In this study, participating students - whether they take part in Transition Year or not – are regarded as young citizens in their own right, rather than merely as citizensin-waiting. More detail on each of the selected constructs, including brief literature reviews and a discussion of the relevance of these measures to Transition Year, is presented in Chapter 2.

1.6.4 Aims of the empirical study

The research question that this study is intended to address, broadly posed, is: to what extent is Transition Year participation associated with positive psychosocial development and wellbeing among Irish students?⁷

This broad question can be broken down into a number of more specific aims with reference to the particular indicators chosen for their relevance to the Transition Year Guidelines (Dept. of Education, 1993) and the findings of previous qualitative research. The aims of the current research are thus:

 To gather cross-sectional quantitative data from Irish secondary school students on the selected indicators of psychosocial development and wellbeing, using well-validated scales from the international psychological literature.

⁷ "Wellbeing" in this context refers to psychological wellbeing. Other factors, such as physical health, are not considered here.

- (ii) To provide descriptive information on these indicators across grade levels.
- (iii) To examine which characteristics of Third Year students predict Transition Year participation, using these indicators together with other background and attitudinal information.
- (iv) To gather longitudinal data from students who took part in the first wave of data collection at time-points one and two years after the initial survey, in order to model the development of the selected indicators over time.
- (v) To assess the contribution of participation in the Transition Year programme to psychosocial development by examining the extent of differences between students who do and do not participate in the programme, both initially (before participation) and following participation in TY.
- (vi) To gather qualitative information on students' opinions on the quality of the Transition Year experience in their school, in order to provide contextual information to assist in interpreting the quantitative data.

The fulfilment of these aims is intended to yield useful information for policy-makers and teachers in Ireland. The unique standing of the Transition Year programme in international terms (Section 1.5) means that there is little opportunity to evaluate the efficacy of TY with reference to comparable programmes in other jurisdictions. However, this uniqueness also means that the results of this research may be of interest to programme developers abroad. To take one illustrative example from the American literature, Galambos and Tilton-Weaver (2000, p. 191) propose that immature and pseudomature adolescents could "benefit from programs to facilitate their passage to genuine maturity." The increasing demand for such programmes (Durlak et al., 2011; Humphrey et al., 2010), and the identification of the dearth of quantitative data as a weakness in existing evaluations of youth development programmes (Durlak et al., 2007, Kristjánsson, 2012), underscores the potential relevance of the Irish Transition Year to international researchers, practitioners, and policymakers as a template for positive youth development.

1.7 Outline of the remainder of the thesis

Next, in Chapter 2, broader issues relating to socioemotional development in adolescence are reviewed, together with correspondences between the intended function of TY and selected indicators of development. The remaining chapters describe the design and results of a longitudinal study set up to address the goals of the research as outlined above. Chapter 3 provides details on study design, methods, implementation, measures, participation rates, and

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data quality. Chapter 4 begins by presenting descriptive statistics of the main outcome measures. Profiles of Transition Year participants and non-participants are then built up in order to examine which characteristics relate most strongly to participation. Chapter 5 presents latent growth curve models that chart the extent and direction of developmental change in each of the socioemotional outcome measures over time. The clustered nature of the data (both in terms of repeated observations across time within individual students, and of groups of students within schools) is accounted for in these models in order to guard against spurious results. Chapter 6 examines students' perceptions of TY and opinions on the programme. These opinions, self-generated in response to open-ended questions, provide a qualitative complement to the quantitative growth models and provide a rich – and extensive – data source in their own right.⁸ Finally, overall findings and key conclusions are drawn in Chapter 7. Recommendations for teachers and policy-makers are given in response to the main findings of the study, along with suggestions for future research.

⁸ Although Chapters 5 and 6 could be regarded as two arms of a 'mixed methods' study, the term is avoided here on the grounds that it reifies a somewhat unhelpful division of research methods into opposing camps that should be either used separately or combined into one (Ercikan & Roth, 2006; Symonds & Gorard, 2010). The term 'multiple methods' is preferred, describing the more flexible view that researchers have access to a wide range of methods with which to approach any research question, and may select whichever methods from this broad toolbox best fit their situation and the questions to be answered.

Chapter 2: Engagement, maturity, and wellbeing in adolescence

This chapter describes the main psychosocial constructs that are examined in this study. As outlined in Chapter 1, the constructs that have been included for inclusion here are: student engagement, social self-efficacy, personal responsibility, subjective age, and life satisfaction and school satisfaction. The prioritisation of these constructs is supported by their relationships with other indicators of psychosocial and academic development and wellbeing, including both positive and negative indicators.⁹ Most importantly, they align closely with the findings of previous qualitative research on Transition Year participation, as well as to the programme's intended function of helping to developing maturity and skills for life and learning among participants (Dept. of Education, 1993).

These selections are not intended to represent an exclusive set of indicators by which the outcomes of Transition Year participation should be assessed. For example, instruments with which to measure other indicators of psychosocial development (e.g., academic selfefficacy) and psychological wellbeing (e.g., positive and negative affect) are available. However, time constraints and an awareness of the need to avoid over-burdening participants with overly-long questionnaires meant that a limited number of constructs could be included for study, and only those judged to be most clearly associated with Transition Year outcomes (see Section 2.7) were included.

Similarly, the TY Guidelines' aim of helping to produce "well developed and reflective young adults" (Dept. of Education, 1993) raises the broader issue of the programme's role in supporting citizenship and enhancing students' readiness to engage meaningfully in wider society. Findings from the International Civics and Citizenship Study show that teachers in Ireland are much less inclined to participate in community events (such as cultural, environmental, or human rights activities) with their junior cycle students than teachers in other countries (Cosgrove, Gilleece & Shiel, 2011). It is possible that this is related to the clear opportunity afforded for such activities by Transition Year, with TY being viewed by teachers as the better time to engage in community activities in the Irish

⁹ Although, as noted in Chapter 1, negative indicators of psychological development and functioning have often historically been assigned precedence over more positive indicators of development, it is not my intention to ignore negative indicators where relevant research exists.

system. Indeed, Jeffers (2015) reports several successful instances of community activities carried out by Transition Year students. Questions of community development and citizenship are valid in this context, but the answers may not be as readily apparent (or answered most appropriately) while students are still in school as they might be for other outcomes that can be more clearly defined in the short-term. For example, an enhanced sense of social justice arising from experiences during TY could lead a young person to spend a year – or a career – working with underprivileged communities in Ireland or abroad, but they may be unlikely to do so until after finishing school and leaving home. As this study was designed to start and finish during participants' school careers, more distal outcomes of this nature were not considered for inclusion.

A further consideration is that the current research is designed to examine outcomes that are associated with Transition Year participation at a broad level, with the intention that findings will be relevant to all schools. For example, constructs such as student engagement and social self-efficacy are universal in the sense that they are applicable to all students to varying degrees, no matter what the content of their Transition Year experience. In contrast, some potential outcomes that could have been included – such as students' level of community involvement or the development of entrepreneurial skills and interests – would likely operate as a function of the availability of (or the relative emphasis on) particular related aspects of the Transition Year programme on a school-by-school basis. These narrower, or more context-dependent, outcomes are not included here.

The remainder of this chapter reviews some previous research on each of the selected indicators and discusses their relevance to Transition Year. The measurement of each construct is described more fully in Chapter 3.

2.1 Student engagement

Student engagement refers to the extent to which students identify with and participate in school life, both academically and socially, feel a sense of belonging at school, and have a personal and willing investment in learning. The construct of engagement is distinct from self-efficacy – an individual's judgement of their own ability to successfully attain a desired level of performance (Zimmerman, 1995) – and academic achievement, but is positively associated with both (Carini, Kuh & Klein, 2006; Greene & Miller, 1996).

2.1.1 Overview

The study of student engagement has been marked by debate over its structure and uncertainty over the appropriate terminology. Various researchers have approached the concept of student engagement with reference to *school engagement, academic engagement, engagement in schoolwork, participation in and identification with school, school bonding, school attachment, orientation to school,* and *student engagement with school*, leading to calls for conceptual clarity and a common definition of engagement (Appleton, Christenson & Furlong, 2008; Eccles & Wang, 2012; Jimerson, Campos & Greif, 2003). The plethora of terms used to describe similar concepts also reflect the many measures which have been used to study engagement, with some studies using single-item measures and others more developed scales. As a consequence, the engagement subtypes have often been studied separately rather than as a whole, leaving the picture of overall engagement somewhat fragmented (Jimerson et al., 2003). Consensus is needed to allow greater comparability across findings, and 'student engagement' is the preferred term for the general construct throughout this thesis.

Engagement is generally held to be a tripartite construct, with (a) *behavioural / social*, (b) *affective / emotional*, and (c) *cognitive / intellectual* components (Fredricks et al., 2004; Jimerson et al., 2003; Willms, Friesen & Milton, 2009). The former of each pair of terms is the most commonly-used in the literature. *Behavioural* engagement describes active participation in school life (e.g., participation in class, involvement in extra-curricular activities). *Affective* or *emotional* engagement denotes feelings of identification with and attachment to the school, teachers, and classmates. *Cognitive* engagement represents a thoughtful and deliberate investment in learning by the student, such as a willingness to think deeply about a problem in order to understand it more fully. Appleton, Christenson, Kim and Reschly (2006) describe a four-part categorisation (*academic, behavioural, cognitive* and *psychological*) that overlaps with this tripartite model. *Psychological* engagement in their terms is similar to affective engagement, with *academic* engagement represented by variables such as homework completion and time on task which are subsumed under the behavioural label by Fredricks et al. (2004) and others.

Research on student engagement can be used to identify functional risk factors that can be targeted and altered by school policy and staff, in contrast to demographic and socioeconomic factors such as family background (Furlong & Christenson, 2008). In considering factors that have been associated with student engagement, it is important to observe the distinction between the indicators of engagement (markers such as absentee rates and homework completion) and its facilitators (factors which play a role in the development

of engagement, such as a student's affective feelings towards the school). Facilitators can be targeted by intervention programmes as a means of influencing student engagement positively, while indicators can be used to identify at-risk students at an early stage of the disengagement process and to monitor engagement levels at the student and school levels as part of a programme of strength-based assessment in schools (Jimerson, Sharkey, Nyborg & Furlong, 2004). More broadly, understanding the developmental processes underpinning student engagement is considered crucial to developing practice and policy to optimise students' social and intellectual development in school (Marks, 2000).

2.1.2 Early school leaving

Student engagement has primarily been studied with a view to understanding its role in early school leaving – and the substantial social, health-related, and economic costs that are associated with early school leaving (Alliance for Excellent Education, 2009; Cutler & Lleras-Muney, 2006; Finn, 1989; Kortering & Braziel, 2008; Levin, 2009; Smyth & McCoy, 2009). The utility of the tripartite model described above, in its individual dimensions and as a global construct, in predicting early school leaving has been confirmed (Archambault, Janosz, Fallu & Pagani, 2009).

In the Irish context, it is clear that a considerable number of young people have completely disengaged, or are disengaging, from the education system. By as early as Fourth class, about one-quarter of 10-year-old pupils say that they do not like going to school (Clerkin & Creaven, 2013). Almost one-fifth of Fourth class pupils also say that they do not feel they belong at their school. In both cases, the Irish figures are substantially higher than the corresponding percentages for their peers in many other countries (Clerkin & Creaven, 2013). These early symptoms of disengagement can be viewed in the light of recent data showing that, despite improving retention rates, about one-in-ten post-primary students still leave school without sitting the Leaving Certificate annually (DES, 2015a). Other pupils leave primary school without entering post-primary education at all. The extent of early school leaving at this stage is harder to estimate, but suggestions ranging from approximately 700 to 1200 children per year (Byrne & Smyth, 2010) make it clear that the phenomenon is not insignificant. Rates of early school leaving are generally found to be higher among students from more socioeconomically-disadvantaged home backgrounds (Byrne & Smyth, 2010; Smyth & McCoy, 2009) and among male students. The Joint Oireachtas Committee on Education and Skills (2010, p. 38), using figures from the Department of Education and Skills, notes that about 23 boys leave school early for every 14 girls who do so.

Under this conceptualisation, early school leaving is the end result of a long and gradual process of disconnection from the school community. The process can potentially begin even before a child begins school through the formation of skills, behaviours, and attitudes (Jimerson, Egeland, Sroufe & Carlson, 2000; World Bank, 2015). Engagement is therefore a dynamic state, rather than an invariable trait – it is dependent on, and responsive to, a range of contextual factors. Understanding the determinants and consequences of engagement may thus allow practitioners to identify students in the early stages of disconnection, and to design suitable interventions with a view to prolonging their active participation in school. By contrast, high student engagement is a potent developmental asset, serving to increase positive developmental outcomes and reduce negative outcomes and behaviours (Becker & Luthar, 2002; Leffert, Benson, Scales, Sharma, Drake & Blyth, 1998).

Over and above the goal of reducing early leaving rates among at-risk students, there is evidence that fostering engagement in the general school population is crucial to the academic, social and emotional development of all students. This is the case both in school, and continuing into adult life after leaving formal education (Reschly et al., 2008). Smyth (1999b) provided strong evidence to underline the importance of maintaining a focus of the needs of all students, even those not obviously at risk, by reporting a social context effect in terms of student-teacher interactions and early school leaving in Ireland. She reported the apparently counter-intuitive finding that the risk of early leaving was higher when individual students had more frequent negative interactions with teachers, but that the risk to an individual student was lower when average negative interactions (aggregated to the schoollevel to reflect the experiences of all students) were more frequent. This can be explained in comparative terms. Students who experience few negative interactions are generally at lower risk of early leaving; however, in cases where they attend a school environment where student-teacher relationships as a whole are especially poor, these students are more likely to leave the school. Conversely, students who experience high personal levels of negative interactions with teachers are more likely to leave school when student-teacher relationships across the rest of the student body are generally good than when relations are generally poor. In such cases, the student may feel victimised by the teacher, in comparison to their peers, and become disengaged.

It should be noted that as well as reported levels of engagement and student-teacher relationships, research suggests a number of other factors with implications for school completion rates. For example, students' own expectations of completing the Leaving

Certificate, their ability to delay gratification for greater reward at a later date, positive attitudes among their family and friends towards completing the Leaving Certificate, and their participation in paid employment outside school are additional indicators that are worth monitoring with an eye on student retention (Freeney & O'Connell, 2012; McCoy & Smyth, 2007).

This discussion is not intended to be a comprehensive review of the literature on early school leaving, but rather serves to highlight the important relationship, inter alia, between student engagement and early school leaving. In this light, any factors that may serve to promote positive experiences in the classroom, enhance a student's sense of wellbeing or belonging at school, or facilitate the growth of positive relationships at school as Transition Year is reputed to - are worth considering as potentially-protective buffers against the risk of early leaving. This view of Transition Year is, however, complicated by evidence that rates of early school leaving are actually higher in schools where TY is provided on a compulsory basis (Smyth et al., 2004). The latter finding hints at the risk posed by mandating an extra year in school for students who may already be at an advanced stage of disengaging, and who might therefore decide to leave school in TY where they might otherwise have held on longer in order to obtain a senior cycle qualification. It is possible that TY participation holds positive implications for some students' continuing engagement, but may come too late in the education system for others (particularly considering the prevalence of symptoms of early disengagement discussed above). This is discussed further in the context of recent junior cycle reforms in Chapter 7.

2.1.3 Self-determination theory

The promotion of student engagement in schools can be aided by an understanding of selfdetermination theory (SDT; Deci, Vallerand, Pelletier & Ryan, 1991). *Self-determination theory* places human behaviour and motivation in context by stressing their relation to three basic psychological needs: for competence, for relatedness (meaningful social relationships), and for autonomy. Qualitative research carried out by Vandekeere (2009) found that children and adolescents (ranging from six to 15 years of age) consistently identified a sense of agency, such as that described by SDT, as a key component of their wellbeing. He also found that the importance of having this sense of agency was regarded by the interviewed children as being too often underappreciated or forgotten by the adults in their lives.

SDT represents an example of a eudaimonic approach to understanding wellbeing (Ryan & Deci, 2001). *Eudaimonic* conceptualisations of wellbeing emphasise 'the life well-

lived', or a virtuous life lived to its fullest potential. By contrast, *hedonic* conceptualisations of wellbeing focus more on 'the good life' – a life characterised by pleasure and subjective happiness. A simplified distinction between the conceptualisations would be that eudaimonia relates to the complete functioning of a person, while hedonia relates to the attainment of their desires. Both viewpoints have long histories, and can be regarded as complementary (if not always easily compatible) rather than standing in opposition to each other (Ryan & Deci, 2001). Life satisfaction is one measure of hedonic wellbeing, and is discussed in Section 2.5.

In a school setting, self-determination theory suggests that enabling students to participate in decision-making processes relevant to their own activities and teaching with an autonomy-supportive style (rather than a controlling one) should contribute to moving students towards more self-regulated behaviour, and to enhanced perceptions of their own competence in, and relatedness to, the school environment (Deci et al., 1991; Reeve, Bolt & Cai, 1999). The fulfilment of these core psychological needs is regarded under SDT as being necessary for psychological growth and positive development, including the growth of intrinsic motivation. The importance of the theory is underlined by suggestions that teachers should be more explicitly trained to promote self-determination among their students, and that intervention programmes aimed at introducing adolescents and their parents to SDT could potentially make a substantial contribution to improving students' quality of life (Nota, Soresi, Ferrari & Wehmeyer, 2011; Reeve, 2006; Reeve & Halusic, 2009).

The Leaving Certificate has often been criticised for rewarding excessive rote learning with a view to preparation for the terminal examinations, with memorising material sometimes given precedence over a deeper conceptual understanding (e.g., Smyth & McCoy, 2011). In contrast, during Transition Year the absence of a major external motivator – in the shape of a high-stakes examination – frees participating students to engage in learning activities for their intrinsic value, a point which Jeffers (2007b) suggests be emphasised by programme designers. Involvement in a mini-company, or a research project, for example, enables students to work creatively and autonomously without concern for writing to the (marking scheme of the) test.

Recent research (e.g., Reschly et al., 2008) has drawn on Fredrickson's (1998, 2001) broaden-and-build theory to set forth a model of how facilitators, such as the sort of teachersupported student autonomy expected in Transition Year, can lead to stronger engagement and better academic performance. These interactions are hypothesised to be reciprocal, a version of what Fredrickson (2001) calls an 'upward spiral'. The upward spiral describes the

process by which positive growth in one area supports positive development in another, feeding into improved emotional wellbeing for the student (which in turn continues the upward spiral). In this way the broaden-and-build theory builds on self-determination theory by turning the unidirectional relationship between need fulfilment and subsequent wellbeing into a reciprocal relationship between need fulfilment, leading to wellbeing, creating enhanced conditions for further need fulfilment.

Evidence suggests that engendering a sense of competence and relatedness in school can, in fact, have positive implications for students' subsequent wellbeing (León & Núñez, 2013; Tian, Chen & Huebner, 2014). Conversely, Reschly and colleagues (2008) found support for the idea that the frequent experience of positive emotions in school is associated with broadened cognitive and behavioural coping strategies, greater student engagement in school activities, and more supportive relationships with teachers. Li, Lerner and Lerner (2010) similarly found that affective engagement is an antecedent of behavioural engagement – that is, students who feel connected to their school are more likely to prepare for class, attend, and complete homework. These behaviours, in turn, are associated with improved academic performance (Li et al., 2010).

As well as the academic implications, feelings of attachment to school are positively associated with students' self-esteem and are negatively associated with substance abuse and antisocial behaviour (Maddox & Prinz, 2003). In fact, a review has shown that interventions targeted specifically at increasing school connectedness can be effective in reducing students' risk-taking behaviour (e.g., violence, alcohol use) (Chapman, Buckley, Sheehan & Shochet, 2013). Shifting the emphasis in the classroom away from interindividual competition between students in favour of greater co-operation is one effective way of fostering relatedness (Martin & Dowson, 2009), as well as social skill. Data from the Canadian National Longitudinal Study of Children and Youth, a large and multi-wave longitudinal study, clearly demonstrate the importance of building relationships and a sense of relatedness through co-operative learning in school:

At school level, 'cooperation' through in-class group activities is highly correlated with better school outcomes and decreased levels of criminal activities for both boys and girls. More conventional measures of school quality, such as the type of school, class size, and teacher's education attainment fall short compared to this group activity variable. Schools may achieve desirable outcomes if resources can be allocated wisely towards increasing the level of inclassroom social 'cohesion' through group activities.

(Zhang, 2011)

In the context of the Transition Year programme, co-operative classes and the use of group work are often among the more novel, and appreciated, aspects of a students' TY experience (Smyth & Calvert, 2011). In this light, it is noteworthy that improved student-teacher relationships and peer-to-peer relationships have also consistently been reported as an outcome of participation in the extra year (Irish Second-level Students' Union, 2014; Jeffers, 2007a; Smyth et al., 2004). Although much of the extant research has examined associations between SDT and wellbeing primarily in only one direction, more recent studies have shown reciprocal relationships between positive school experiences (meeting students' needs for competence, relatedness, and autonomy) and indicators of classroom motivation and positive emotion (Reeve & Lee, 2014; Stiglbauer, Gnambs, Gamsjäger & Batinic, 2013). This appears to present strong support for the broaden-and-build theory, and for the relevance of self-determination theory to educational settings. However, further tests are necessary to expand on these findings.

2.1.4 Self-regulated learning

Self-regulated learners are characterised by an awareness of what they know and what they still need to learn on a particular task, and thereafter by actively taking steps to acquire further necessary information or skill (Paris & Newman, 1990; Zimmerman, 1990). Zimmerman's (2001) later definition of self-regulation as the degree to which students "are metacognitively, motivationally, and behaviourally active participants in their own learning processes" (p. 5) succinctly captures the broad scope of the construct. As suggested by this definition, the term is applicable to multiple facets of a student's motivations and activities. It incorporates knowledge of learning strategies (e.g., reviewing work, goal-setting, summarising, seeking help), an awareness of when a particular strategy is required in order to maintain forward momentum or to assess one's current status, and the continuing motivation to do so. A key feature underpinning everything is that the learner feels a sense of ownership or control over the learning process. With regard to the current research, the Department of Education's programme guidelines for Transition Year (1993) describe a vision of student development that is closely aligned with the characteristics of successfully self-regulating learners: "planfulness, control, and reflection ... competence and independence" (Paris & Newman, 1990, p. 87).

Self-determination theory suggests that learning is best achieved when learners are intrinsically motivated to participate (Guay, Ratelle & Chanal, 2008). Offering students individually challenging, concrete, and attainable goals can provide them with opportunities to experience success in the classroom, and with that a sense of mastery and competence.

These experiences support students' perceptions of autonomy, which feeds back into a heightened sense of autonomous (or intrinsic) motivation for further learning. In this way, by promoting self-regulation in schools, students are encouraged to take control of their own learning and to become actively-contributing members of the school community. Autonomy-supportive teaching behaviours include allowing time for independent work, acknowledging and listening to students' experiences, praising signs of improvement and mastery, providing specific feedback, encouraging effort, being responsive to questions and comments, and allowing students time to talk. Such practices provide students with positive interactions and high-quality interpersonal relationships in the school setting (Reeve & Jang, 2006; Smyth, 1999a) while promoting self-regulation of learning processes and outcomes (La Guardia, 2009; Niemiec & Ryan, 2009).

The relatively stress-free nature of the Transition Year programme, with its focus on innovative teaching methods and on project and group work (Hayes & Childs, 2012; Smyth & Calvert, 2011), stands in stark contrast to the structured classroom experience of other grades in which project work and student-oriented teaching feature only rarely (Gilleece, Shiel, Perkins & Proctor, 2009).¹⁰ TY thus provides a space within which teachers and students can learn to relate to each other in different ways. As an example, Schuitema et al. (2012) report a comparison of 'traditional' classrooms and 'innovative' learning environments (defined as those that emphasised student autonomy, responsibility, and the use of metacognitive strategies to self-regulate progress). They found that students in more innovative classrooms perceived greater autonomy support from teachers and greater real-life relevance of what they were learning. These factors were associated with greater engagement in learning mathematics and English, and with greater use of metacognitive self-regulatory strategies (Schuitema et al., 2012). That is, by supporting self-regulation, the students in 'innovative' classrooms learned to take greater ownership of their learning processes and learning outcomes. This sense of ownership, in turn, fosters positive behavioural and academic outcomes and a broader sense of engagement (Baker, Derrer, Davis, Dinklage-Travis, Linder & Nicholson, 2001).

¹⁰ Recent reforms to the junior cycle (DES, 2015b) are aimed at redressing this balance, although the students who took part in this study between 2011 and 2013 would have received their junior secondary education before these changes.

2.1.5 Associated outcomes

In general, students who are encouraged to develop more autonomous regulatory styles and who develop greater intrinsic motivation for schoolwork report a range of positive outcomes. They tend to stay in school longer, have higher achievement, are more welladjusted, feel more engaged, are rated by observers as being more behaviourally engaged in schoolwork, and feel more able to achieve their academic aspirations (Deci et al., 1991; Gorard, 2010; Grolnick, Ryan & Deci, 1991; Jang, Reeve & Deci, 2010; Kirk, Lewis, Scott, Wren, Nilsen & Colvin, 2012; Macaskill & Denovan, 2013; Vallerand, Fortier & Guay, 1997; van Ryzin, Gravely & Roseth, 2009). In the Netherlands, Opdenakker, Maulana, and den Brok's (2012) longitudinal study showed that students' autonomous motivation declined over the course of a school year as their teachers "focused too much on keeping students on tasks and ... (unconsciously) neglected the interpersonal relationships" (p. 113). They suggest that a shift to a more distant teaching style led to a deterioration in student-teacher relationships, with a corresponding move from autonomous regulation by the students to a more controlled (externally-motivated) regulatory style. These studies, amongst others, demonstrate the importance of attending to students' socioemotional functioning at school alongside more traditional academic measures of progress.

Analysis of the OECD's Programme for International Student Assessment (PISA) in 2000 showed that, in Ireland, about one-third of 15-year-old students were categorised as 'feeling isolated' in school (Willms, 2003). Isolated students were described as performing well academically and participating in school (for example, with good attendance records) but reported feeling that they were not part of the school community. In other words, they were behaviourally but not affectively engaged at school - meaning that, in a setting where they spent substantial periods of time and ostensibly performed well, they nonetheless felt out of place. A further one-fifth of students also participated well despite low feelings of belonging in school, but they performed poorly academically (from .8 to .9 of a standard deviation below the mean). Students born outside Ireland and those from a low socioeconomic background were more likely to report a low sense of belonging. Finally, about one-tenth of students reported below-average feelings of belonging together with very low participation levels (low behavioural engagement). Male students and those from a low socioeconomic background were more likely to belong to this cluster, categorised as 'absentee students'. In a related vein, in terms of school belonging, it has been reported that as few as 15% of Irish 15-17-year-olds report any involvement in making their school's rules (OMCYA, 2008). Similarly, junior cycle students in Ireland report less involvement in making decisions about

their school and classroom, as well as poorer student-teacher relations, than their peers internationally (Cosgrove et al., 2011).

Findings such as these suggest one possible route to offering disengaged students the prospect of participating meaningfully in school life. The Association of Secondary Teachers, Ireland (1993) notes that Transition Year, in particular, affords schools a unique opportunity to consult with students and engage them in the decision-making process. If fully utilised, a more consultative approach should have positive implications for the success of the year and for the participating students, although this is not always simple in practice. For example, merely offering students a choice from a set of teacher-determined options is not enough without additional autonomy-supportive behaviour from teachers, such as providing a rationale for the selected options (Reeve, Nix & Hamm, 2003). The tendency for students who participate in Transition Year to experience greater involvement and more positive interactions with their teachers is therefore noteworthy.

The stronger relationships reported between Transition Year participants and their teachers (Jeffers, 2007a; Smyth et al., 2004) suggests another pathway by which the Transition Year experience may promote engagement with school. Internationally, students' relationships with their teachers have been shown to link positively with student engagement both directly and indirectly (via more positive perceptions of school), as well as with higher educational aspirations, more positive behaviours, student wellbeing, and observed academic achievement (Bergin & Bergin, 2009; Furrer & Skinner, 2003; Roorda, Koomen, Spilt & Oort, 2011; Rosenfeld, Richman & Bowen, 2000; Schuchart, 2013; Soutter, Gilmore & O'Steen, 2011; Zimmer-Gembeck, Chipuer, Hanisch, Creed & McGregor, 2006). From a teaching perspective, teachers themselves often highlight student engagement in class as being among the main sources of positive experience in their work (Kitching, Morgan & O'Leary, 2009; Transition Year Curriculum Support Service, 2000).

In general, supportive and mutually respectful student-teacher relationships should be conducive to the development of student self-regulation – particularly if supported by teachers' recognition of students' self-regulating behaviours (Shernoff, Csikszentmihalyi, Schneider & Shernoff, 2003; Willms et al., 2009). A wealth of evidence is available to suggest that encouraging the creation of stronger bonds between students and their peers and teachers, as is reported to occur during Transition Year, can provide benefits in both socioemotional and academic terms. Simultaneously, the development of broader metacognitive (self-regulatory) skills by autonomous, competent learners – skills developed, for example, through group work and project work during TY – should lead to greater engagement and academic success in later years.

2.2 Social self-efficacy

Self-efficacy at a general level refers to a person's subjective belief, or judgement, in their ability to engage competently and successfully in a desired behaviour. More succinctly, self-efficacy can be considered one's "belief in the power to produce results" (Bandura, 2001).

2.2.1 Overview of the general construct

The concept of self-efficacy derives from social cognitive theory (Bandura, 1986), which states that environmental events, an individual's affect and cognition, and his/her behaviour operate on one another as a triad of reciprocal influences. As a cognitive construct, self-efficacy is distinct from more affective judgements of self-worth (e.g., self-esteem). It is related to but distinct from self-concept (one's perceptions of self) in that it incorporates expectations of success, as well as perceptions of skill, in a particular context.

A person's self-efficacy judgements have behavioural consequences and can influence the choice of situations requiring particular competencies, as well as subsequent performance in those situations, persistence when facing obstacles and recovery from negative feedback (Bandura, 1982, 1993, 2004). The relationship between efficacy and performance is reciprocal (Singley, Lent & Sheu, 2010). That is, progress, or the lack thereof, towards a goal provides a source of information that feeds back into one's context-sensitive sense of efficacy. This feedback information either reinforces or weakens efficacy beliefs, which in turn influence future performance in that particular domain, and so on. Efficacy beliefs thus lie at the heart of personal agency – the ability to exert influence in the world and to make things happen intentionally (Bandura, 2001, 2006b).

Self-efficacy beliefs can be fostered to varying degrees in several ways, through both direct and indirect experience (Anderson & Betz, 2001; Bandura, 1977; Lent, Lopez, Brown & Gore, 1996). Direct experiences include previous personal instances of mastery or success in performing a task, which are considered to be the most potent source of self-efficacy information (Bandura, 1977; Bilgin & Akkapulu, 2007; Usher & Pajares, 2008). Successful performance of a task leads to greater confidence that a positive outcome will be obtained in similar future situations – particularly if the successfully-accomplished task had presented a challenge to the performer's skills. Conversely, poor performance undermines self-efficacy beliefs. Self-efficacy feedback is appraised cognitively, with the impact of any particular

instance being dependent on the relative importance of one's perceived ability in a task, the difficulty of the task, the amount of effort required and assistance received, patterns of previous failures and successes in similar tasks, and one's perceived similarity to models who attempt the same task (Schunk, 1991).

Self-efficacy judgements are best described in context-specific forms rather than as abstract generalisations (Lent & Brown, 2006; Pajares, 1996; Pajares & Miller, 1994). For example, academic, self-regulatory, and social self-efficacy beliefs can be reliably differentiated (Bandura, Barbaranelli, Caprara & Pastorelli, 1996; Pastorelli, Caprara, Barbaranelli, Rola, Rosza & Bandura, 2001). This implies that self-efficacy can be strengthened in one domain in response to relevant experiences, while self-efficacy related to another domain remains unaffected.

2.2.2 Self-efficacy in social settings

Social self-efficacy relates specifically to the social domain. It refers to confidence in one's ability to manage interpersonal relationships and to handle new or difficult social demands (Jerusalem & Hessling, 2009). A high sense of social self-efficacy is beneficial in situations where relationships or friendships are being established, where help is required (whether as recipient or as donor), where a public performance is expected, and when participating in social groups. Social situations such as these are known to be particularly daunting in adolescence (Connolly, 1989). This conception distinguishes social self-efficacy from social assertiveness, which refers specifically to perceptions of effectiveness in circumstances that involve social conflict, such as telling someone who has skipped a queue to wait their turn (Connolly, 1989; Wheeler & Ladd, 1982). As well as contributing to personal agency, as noted above, a high sense of *social* self-efficacy is particularly important for the effective exercise of socially-mediated or proxy agency (enlisting the aid of another person, such as a teacher or friend, to secure a desired outcome on one's behalf) and collective agency, such as pooling resources and working in tandem with others towards a common goal (Bandura, 2006a).

Social self-efficacy and social competences, such as verbal and nonverbal communication or conflict resolution skills, feed into one another. Adolescents' self-regulating evaluations of their personal competencies shape their self-efficacy beliefs, and so guide the selection of goals or activities that can realistically be pursued (Gestsdottir & Lerner, 2008; Rubin, Martin, Bruning & Powers, 1993). Put another way, self-efficacy beliefs represent "an avenue through which individuals exercise control over the events that affect

their lives" (Pajares, 1996, p. 544). In practice, this means that a student with low social selfefficacy will avoid difficult social situations or lack confidence in their actions, where a classmate with high social self-efficacy might interpret the same difficult situation as a challenge, and success in that situation as testament to their social skills. A student who resolves a stressful social situation successfully will find it a positive experience of applied social skill, which contributes to enhanced self-efficacy in similar future situations (Bilgin & Akkapulu, 2007).

Students with high social self-efficacy might be expected to be more willing to attempt, and persist with, a new or challenging social situation – for example, presenting a project to their class or participating in adult interactions. These situations are more common in Transition Year than at any other point in Irish secondary school life. The TY Guidelines, for example, call for special emphasis in TY on group discussions, debates, interviews and role play in class, work experience/simulation, and service in the community as part of its aim to promote "social awareness and increased social competence" (Dept. of Education, 1993). Jeffers (2007a) suggests that the contrast between these learning methods and the traditional teaching favoured in examination classes is perceived by students who have taken part in the TY programme to have benefits for themselves and their classmates, and "especially in relation to personal and social confidence and competences" (p. 56). One Sixth Year student observes:

I know we had a few girls in our class and I think after [Transition Year], you would notice in Fifth Year, you would say "she wasn't like this in Third Year". You come out of yourself an awful lot. You are more confident. You are better. You are more outspoken.

(Jeffers, 2007a, p. 57)

The social aspect to Transition Year – group work in class, collaboration on projects, shared experiences unique to TY – is seen to build on the positive characteristic of school as a place where students meet their friends each day. As well as facilitating greater social interaction, Transition Year practices encourage students to learn to work with friends and peers on a semi-formal, structured, almost 'professional' basis (for example, while working on a mini-company). Teachers observe that "students develop working relationships with classmates rather than academic learning alone" (Jeffers, 2007a, p. 92). Again, this contrasts with the inward-focused, individual approach to study and work that dominates Junior Certificate and Leaving Certificate classes. The chance to develop socially valuable skills –

such as expressing and elaborating on opinions in front of the class, discussing ideas with teachers, and working collaboratively in groups – without the pressure of looming highstakes exams are repeatedly highlighted in Fifth Year and Sixth Year as being a positive feature that allows students to become comfortable in such situations. These experiences are therefore seen to promote students' social self-efficacy, both through their own direct experience and also vicarious learning through peer modelling.

Students' views in this regard are clearly echoed by their teachers. Jeffers (2007a) reports that 97% of the 113 teachers surveyed in his case study schools either *agreed* or *strongly agreed* that students were more confident after participating in TY (no one disagreed, with 3% offering no opinion). Similarly, 90% of teachers agreed that TY promotes social awareness and 90% were of the opinion that students are more socially competent after their participation in Transition Year. One teacher illustrates this point of view:

I find for the quieter student it gives them a chance to become involved. They often become more vocal and articulate, voice opinions, etc. Allows leaders to develop. Both new leaders and students who would normally be cheerleaders become focused and good at delegation.

(Jeffers, 2007a, pp. 88-89)

2.2.3 Associated outcomes

The importance of social efficacy to success in school life has often been highlighted by previous research. Students who have confidence in their ability to relate to teachers and other students are likely to have a more positive perception of the classroom, a greater sense of belongingness and engagement, and are less likely to avoid asking for help with academic work when required (Patrick, Hicks & Ryan, 1997; Ryan & Pintrich, 1997). Social rejection by peers leads to inhibited classroom participation (Ladd, Herald-Brown & Reiser, 2008) and is linked to greater conduct and attentional problems, poorer academic performance, and greater risk of early school leaving (Ollendick, Weist, Borden & Greene, 1992; Parker & Asher, 1987). Social self-efficacy beliefs regarding peers and teachers are also significantly related to academic aspirations (Bandura et al., 1996) and to perceptions of academic efficacy (Patrick et al., 1997), which in turn are strongly linked to actual academic achievement (Multon, Brown & Lent, 1991; Pajares, 2006; Schunk & Pajares, 2002).

Patrick et al. (1997) argue that "it appears that it may be beneficial to students if teachers attempt to form and maintain relationships with their students in which the students feel comfortable to interact, ask for assistance when needed, and generally feel positive about

the relationship" (p. 122). Such constructive, mature, student-teacher relationships are noted as an outcome of Transition Year participation (Jeffers, 2007a), and these successful interactions may be expected to strengthen participating students' social self-efficacy, further contributing to positive interactions in subsequent years. Jerusalem and Hessling (2009) describe two intervention efforts in German schools showing that students' social selfefficacy can be supported by creating a positive classroom climate with responsive teachers. The German students who took part in the interventions 'learned' social competences with their peers and, importantly, gained belief in their own ability to cope with social demands. As a high sense of social self-efficacy is associated with more constructive approaches to resolving conflict in group or team situations (Desivilya & Eizen, 2005), such interventions may contribute to promoting a collaborative group dynamic as well as individual social efficacy.

Looking beyond school functioning, judgements of social self-efficacy are linked to peer attachment in late childhood, early adolescence, and early adulthood (Coleman, 2003; Wright & Perrone, 2010). In adolescence, social self-efficacy ratings are positively associated with self-perceived social acceptance and are negatively associated with social withdrawal (Connolly, 1989). Conversely, social confidence and self-efficacy are negatively associated with loneliness, social anxiety, and shyness (Anderson & Betz, 2001; Cheng & Furnham, 2002; Smith & Betz, 2000, 2002; Wei, Russell & Zakalik, 2005). In contrast to introversion, which describes an inward focus but little difficulty relating to others when appropriate, and low sociability, which is a non-fearful preference for solitude, shyness refers to maladaptive anxiety-based behavioural inhibition and avoidance in social situations (Smith & Betz, 2000). Social efficacy beliefs in adolescence are negatively related to shyness both concurrently and longitudinally; adolescents with a greater sense of social self-efficacy are less shy two years later, even after taking initial levels of shyness into account (Caprara, Steca, Cervone & Artistico, 2003). Judgements of social self-efficacy in adolescence also predict actual social behaviour, such that lower self-efficacy is linked with greater avoidance of social interaction and greater inhibition of social behaviour (Innes & Thomas, 1989).

These studies suggest that students who are more socially efficacious feel better able to interact socially and are better-placed to form relationships in practice. A low perception of efficacy in adolescence has negative implications for social ability as an adult and for a successful transition to third-level education, as avoidant behaviour discourages social learning and may foster doubts in future social situations (Innes & Thomas, 1989; Patterson & O'Brien, 1997 [cited in Smith & Betz, 2000]). Lack of perceived social competence among

late adolescents and young adults, manifested as shyness, has been identified as a possible inhibitory factor in their career development and vocational decision-making. For instance, shy students' lack of belief in their social capabilities may lead them to constrain their occupational choices to fields that require little social interaction (Bandura, 2006a; Hamer & Bruch, 1997). Supporting this hypothesis is the finding that social self-efficacy is positively correlated with career decision-making self-efficacy (Smith & Betz, 2002; Wright & Perrone, 2010), and that social confidence in career-related social interactions – such as teaching a skill, meeting people, or comforting a distressed person – is associated with greater career decision-making in undergraduate students (Anderson & Betz, 2001).

The value of a high sense of social efficacy is underlined by its strongly positive relationship with life satisfaction (Fogle, Huebner & Laughlin, 2002; Lent et al., 2005; Vecchio et al., 2007). This may be partially attributable to more socially-skilled individuals perceiving their life experiences to be less stressful, which in turn contributes to enhanced life satisfaction (Segrin, Hanzal, Donnerstein, Taylor & Domschke, 2007). More sociallyskilled students may also be more likely to seek social support from friends or significant adults when they do face difficulties. This practice is associated with greater life satisfaction than avoidant coping behaviours, such as distancing oneself from the problem (Saha, Huebner, Hills, Malone & Valois, 2014). Beliefs about social self-efficacy generally are related to the ability to manage positive and negative emotions, with these beliefs operating as a pathway through which the self-regulation of emotion influences individuals' prosocial behaviour, life satisfaction and wellbeing (Caprara & Steca, 2005a, 2005b). In addition to life satisfaction, a strong sense of social self-efficacy has been linked to a further range of positive indicators, including self-esteem, self-worth, optimism, use of coping strategies, and happiness, and it is negatively related to depressive symptoms (Caprara & Steca, 2005a; Connolly, 1989; Di Giunta, Eisenberg, Kupfer, Steca, Tramontano & Caprara, 2010; McFarlane, Bellissimo & Norman, 1995; Smith & Betz, 2002). A relevant two-year longitudinal study showed that low social efficacy contributes to depression in early adolescence both directly and indirectly, through poorer academic achievement, and through a lessened prosocial orientation leading to greater problem behaviour (Bandura, Pastorelli, Barbaranelli & Caprara, 1999).

Social self-efficacy, therefore, seems to reflect an important component of adaptive social development. As perceptions of self-efficacy are malleable and can be enhanced through experience, it has been suggested by international researchers that efficacy beliefs could be targeted by programmes that aim to support adolescents' positive development and life satisfaction (Fogle et al., 2002; Lent, 2004; Vecchio et al., 2007; Wright & Perrone, 2010). Research suggests that experiencing a co-operative classroom – where students interact with and depend on each other – helps to promote social self-efficacy and wellbeing by strengthening students' confidence in their capacity to handle stressful social situations, as well as by meeting their need for relatedness (see Section 2.1.3) (Jerusalem & Hessling, 2009; Thoonan, Sleegers, Peetsma, & Oort, 2011). As discussed above, co-operative classrooms are more common in Transition Year than at other grade levels in Ireland, and the programme also provides opportunities for participants to experience a range of social interactions with peers and adults outside the classroom. Therefore, the extent to which TY facilitates the enhancement of social efficacy beliefs, and ways in which such beliefs could be targeted more explicitly as part of the Transition Year, are worth examining in this context.

2.3 Personal responsibility

Personal responsibility (or *psychosocial maturity*) is a key feature marking the successful transition to adulthood. It encompasses the development of "psychological wholeness in individuals, i.e., the completed development of persons as both private and social beings" (Greenberger & Sørensen, 1974). Maturity, in these terms, refers to a person's ability to function adequately in society by demonstrating independence, the capacity to interact appropriately with others, and an awareness of social responsibility (Galambos, Turner & Tilton-Weaver, 2005). These theorised views of maturity echo the ambitions expressed by programme developers for students participating in Transition Year (Dept. of Education, 1993).

2.3.1 Overview

Differences in maturity between younger and older adolescents and adults have practical implications in, for example, judgements of legal responsibility (Cauffman & Steinberg, 1995; Steinberg & Cauffman, 1996). The Psychosocial Maturity Inventory (PMI; Greenberger & Bond, 1984; Greenberger, Josselson, Knerr & Knerr, 1975) has been widely used to study this construct with adolescent populations. The complete inventory consists of three summary scales made up from nine subscales. These are termed Personal Responsibility (self-reliance, work orientation, identity), Interpersonal Adequacy (enlightened trust, communication, knowledge of roles), and Social Adequacy (social commitment, openness to socio-political change, tolerance of individual and cultural characteristics). The measured subscales correspond well with teacher ratings of students' maturity (Greenberger et al., 1975). The PMI is sufficiently sensitive to the maturational changes associated with successful youth development programmes to be used in their assessment over time,

although it is not recommended for evaluating short-term (6-8 week) programmes (Hamilton, Richards, Stewart, Frankel & Caracelli, 1983).

In practice, the PMI's personal responsibility scale has been used frequently on its own as a general measure of maturity, for several reasons. These include consistent empirical support for the reliability and validity of the full scale and its component subscales, its greater suitability for use with early as well as late adolescents, its high loading on a composite factor of personal maturity, its association with other measures of personal adjustment, and for comparability with previous research (Dalton and Galambos, 2009; Eaker & Walters, 2002; Galambos, Magill-Evans & Darrah, 2008; Galambos & Tilton-Weaver, 2000; Greenberger et al., 1975; Josselson, Greenberger & McConochie, 1975a; Skeem & Cauffman, 2003). Applied individually, the work orientation and self-reliance subscales have been shown to discriminate well between students evincing high and low degrees of behaviours corresponding to these qualities, as judged by their teachers (Josselson, Greenberger & McConochie, 1975b). Taken together, self-reliance and work orientation fall under the overlapping conceptualisation of 'functional autonomy' – the capacity to pursue a strategy to achieve one's goals (Noom, Deković & Meeus, 2001).

Self-reliance, in Greenberger and Sørensen's (1974) model, comprises three components. These are, first, the absence of excessive dependence on others, which denotes a person's ability to act in a situation where no one available has relevant resources greater than their own, where s/he possesses adequate resources for appropriate action, or when no others are available to depend on. Second, a sense of control, or a person's perception that their actions and performance can influence their environment to their benefit. Third, initiative, defined as a person's willingness to take appropriate action when a particular situation demands it. Taken together, these traits describe "perhaps the most basic disposition that underlies adequate individual functioning" – self-reliance (Greenberger & Sørensen, 1974).

Work orientation refers to a person's capacity to experience pleasure in work, to strive for standards of competent task performance, and to deploy general task- or work-related skills appropriately. It can be contrasted with work avoidance, the tendency to do as little work as possible (Wigfield, Eccles & Rodriguez, 1998). For a person who is highly workoriented, performing a given task well brings satisfaction. So, too, does the very process of working and utilising one's skills. Work orientation may contribute to social functioning in ensuring that a person 'pulls their weight', and hence as a factor in maintaining relationships where teamwork or co-operation is required (Greenberger & Sørensen, 1974). Wong and Csikszentmihalyi (1991) found that work orientation correlated significantly with grades and with time spent studying, although not necessarily with motivation while studying. Among undergraduates, work orientation is negatively associated with a sense of academic entitlement (e.g., expecting good grades for modest effort) and general psychological entitlement (feeling more deserving than others) (Greenberger, Lessard, Chen & Farrugia, 2008). In other words, students who report taking greater satisfaction in working and achieving their targets feel less entitled than students with less of an orientation towards work. There is some evidence that part-time work in adolescence may enhance work values (Zimmer-Gembeck & Mortimer, 2006).

2.3.2 Associated outcomes

As might be expected – by definition – research consistently shows that older adolescents show greater psychosocial maturity than young or mid- adolescents (Cauffman & Steinberg, 2000; Greenberger et al., 1975; Monahan, Steinberg, Cauffman & Mulvey, 2009; Rosenthal, Gurney & Moore, 1981; Schultz, Selman & LaRusso, 2003). In a study including adult participants, Cauffman and Steinberg (2000) found that personal responsibility – work orientation, self-reliance and identity – was significantly higher among 12th grade students (equivalent to Sixth Year in Ireland) than among 8th grade (Second Year) and 10th grade students (Transition Year). There were no differences on this scale between the 12th grade adolescents and young adults (under 21) or adults (over 21) in college, suggesting that development of personal responsibility had stabilised by the final year of secondary school. However, the young adults and adults reported greater perspective and temperance than all three of the adolescent groups.

There is less consistency with regard to gender differences in personal maturity in adolescence. Some studies report greater self-reliance for females (Lamborn, Mounts, Steinberg & Dornbusch, 1991; Palmer et al., 2004; Steinberg & Silverberg, 1986). Other studies show no difference between males and females (Lamborn & Groh, 2009), while others find that males report greater initiative, which correlates highly with self-reliance (Rosenthal et al., 1981). Rosenthal et al. (1981) also report that males show greater identity and autonomy; and that females score higher for intimacy. On the other hand, Cauffman and Steinberg (2000) found no gender difference on the overall personal responsibility PMI scale. Similarly, Mantzicopoulos and Oh-Kwang (1998) found no gender difference on any of the personal responsibility subscales – self-reliance, work orientation, or identity – with American and Korean adolescents.

The practical utility of assessing personal responsibility is supported by its association with antisocial decision-making, measures of wellbeing, and academic achievement. Cauffman & Steinberg (2000) show that scores on the personal responsibility scale of the PMI are negatively associated with antisocial decision-making. Their composite index of maturity – composed of work orientation, self-reliance, identity, temperance and perspective – is found to be a stronger predictor of antisocial decision-making than chronological age. Furthermore, this maturity index significantly predicts antisocial decision-making among participants of the same age within each of the groups (8th, 10th, and 12th grades, under-21 adults, and over-21 adults) that were sampled for their study.

Personal responsibility in adolescence is also positively associated with academic achievement. In one longitudinal study, both greater psychosocial maturity and higher school grades were reported by the adolescent children of parents who had an encouraging, democratic and firm parenting style (Steinberg, Elmen & Mounts, 1989). The positive association that was found between parenting style and school grades appeared to operate at least partially though adolescents' own maturity. On closer examination, the identity aspect of maturity was unrelated to grades, but work orientation and self-reliance were both significantly associated with a higher grade point average (Steinberg et al., 1989). Similar results were reported by Deslandes, Potvin and Leclerc (2000) in a survey of Canadian adolescents: students' reported levels of psychosocial maturity mediated the effect of parenting and parental involvement on academic achievement. Again, work orientation had the strongest association with school grades, followed by self-reliance and identity.

Previous research on Transition Year has mostly been based on interviews with students, teachers and parents (Irish Second-level Students' Union, 2014; Jeffers, 2007a; Smyth et al., 2004; Smyth & Calvert, 2011). A recurring feature of these interviews is that participation in Transition Year is credited with enhancing students' 'maturity' (and most often described using this general term). This maturity is seen as a positive development for students, both on a personal level and with regard to their later preparation for the Leaving Certificate. One illustrative comment comes from a teacher who observes that:

... having surveyed sixth years, it was quite clear from their responses that the Transition Year benefited them greatly, in every sense now, from an educational sense, from an academic sense but on a personal, mature level as well. It moved them up another year and gave another year of maturity before they approached the Leaving Certificate.

(Smyth & Calvert, 2011, p. 16)

The Irish Second-level Students' Union (2014, p. 40), having conducted focus groups with a number of TY coordinators in Dublin, Cork and Galway, note that:

Transition Year coordinators also stated that students who do Transition Year become mature: "Teachers have said they have noticed this within Fifth Year classes when students enter the room, sit down and are ready for work." Some Transition Year coordinators feel that students have gotten rid of their "overall mischief" and have gotten to have some fun within Transition Year. There is less conflict and a different atmosphere, as a result, in Fifth Year.

Both self-reliance and work orientation are of interest here given their conceptual relevance to the aims of the TY programme. For example, the Guidelines (Dept. of Education, 1993) state that students "will take greater responsibility for their own learning and decision making" during the course of their participation in Transition Year. A high work orientation and strong sense of self-reliance might be expected to be among the indicative attributes of such "autonomous, participative and responsible" citizens, and perhaps represent the psychological constructs that most closely resemble what is colloquially called 'maturity' among TY students.

2.4 Subjective age

Subjective age describes how old a person feels, relative to their chronological (actual) age and to same-age peers. It is distinct from the *desired* or *ideal age*, which represents the age that a person would like to be. Subjective age is a schematic construct: age-aware individuals hold generalised perceptions about themselves and their age, and this schema guides how they process information about themselves (Montepare & Clements, 2001). Within adolescence, it can be taken as a subjective indicator of how mature someone feels themselves to be in comparison to their peers.

2.4.1 Overview

Montepare (2009) describes a lifespan framework in which personal perceptions of age derive from both distal reference points (internally-held personal models of development, against which individuals evaluate themselves and their age) and proximal reference points. These proximal points are hypothesised to include historic events (celebrated or marked occasions, such as birthdays and anniversaries), age-related physical events (e.g., the onset of puberty, a heart attack, the death of a loved one), normative events (age-related social and cultural events, such as graduating or reaching the legal voting age), and interpersonal events (social interactions with people of a different age, or people who hold particular expectations

about age-related behaviour). Other research supports the relevance of age-related legal markers and, to an extent, biological development to adolescents' and young adults' conceptions of growing up, but suggests that certain role transitions (such as marriage, entering full-time employment, or finishing education) are less important (Arnett, 2001; Barker & Galambos, 2005). Montepare's (2009) framework implies that while one's internal age identity is relatively stable in the absence of these events, proximal markers make age particularly salient to the individual and can lead to temporary variations or more significant changes in subjective age.

Research consistently shows that subjective perceptions of age follow a predictable inverted U-shape pattern through the lifespan. Adolescents tend to feel older than their chronological ages, young adults feel themselves to be about the same age, and older adults feel younger than their years (Guiot, 2000, 2001b; Montepare & Lachman, 1989; Sato, Shimonaka, Nakazato & Kawaai, 1997 [cited in Montepare, 2009]). The adolescent years are developmentally unique as the only period of the lifespan in which people report feeling older than they actually are.

The 'crossover points' marking the boundaries of this period have been estimated as occurring between 11.2 and 13.6 years (moving from younger to older subjective age), and between 22.9 and 25.5 years of age (moving from older subjective age to younger), with older subjective age peaking at around 18.3 years old (Arbeau, Galambos & Jansson, 2007; Galambos, Albrecht & Jansson; 2009; Galambos, Turner & Tilton-Weaver, 2005). Sampling variability and reliance on Canadian participants means that these estimates should be considered cautiously in an Irish context. Nonetheless, Galambos et al. (2005) suggest that these crossovers represent a series of shifts in the reference group to which the adolescent compares themselves. Early adolescents entering secondary school at age 12, for example, find themselves suddenly sharing a social world with comparatively adult older teenagers, as well as experiencing the physical changes of puberty. In contrast, emerging adults in their early 20s are becoming part of adult society and the workplace. It is likely that they begin to compare themselves to early/middle adults rather than to late adolescents, prompting feelings of relative youth. These social changes are similarly relevant to Irish adolescents.

2.4.2 Associated outcomes

Although a substantial body of literature on subjective age exists, much of it relates largely or exclusively to adult and elderly samples (e.g., Barak, 2009; Zebrowitz & Montepare, 2000). These studies show that the gap between subjective and chronological ages in adulthood

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tends to increase with advancing years. Twentysomethings feel approximately their age, but significantly larger discrepancies are reported for each subsequent decade-bracketed age group (Guiot, 2001b). Subjective age in adult populations is associated with perceptions of health (better health correlating with lower subjective age; Hubley & Russell, 2009), feelings of being young, rather than a desire to be young (Guiot, 2001a), conscientiousness (Knoll, Rieckmann, Scholz & Schwarzer, 2004), and general self-efficacy, optimism, and life satisfaction (Teuscher, 2009). Among young adults, Montepare (1991) reports an association between having an older subjective age and self-perceived dominance, confidence, and social potency.

With regard to adolescence, it might be supposed that subjective feelings of maturity – a sense of feeling older than one's chronological age – would be associated with more typically 'adult' behaviours. Adolescents who are more physically mature (e.g., exhibiting facial hair for boys, breast development for girls, or body hair for both) report higher subjective ages (Galambos, Kolaric, Sears & Maggs, 1999). These physically mature and subjectively-older adolescents have been shown to engage in more problem behaviours and sexual activity (Flannery, Rowe & Gulley, 1993; Miller, Norton, Fan & Christopherson 1998; Steinberg & Morris, 2001).

Consistent with this research, Galambos et al. (1999) found that higher subjective ages among 15-year-olds were correlated with greater behavioural autonomy (such as going somewhere without parents' permission or unaccompanied by an adult), more involvement with other-sex peers, and substance use. For girls but not boys, high subjective age was also associated with greater problem behaviours such as antisocial activities, school misconduct, and disobedience to parents. Moffitt (1993) suggests that these problem behaviours manifest "in situations where such responses seem profitable to [adolescents]" as a response to a perceived maturity gap. This refers to the situation whereby, for example, a teenager may be physically mature and regard him/herself as adult, yet still be unable to participate in some of the positive features of adult life (such as driving, voting, having freedom to buy alcohol or live by themselves). Disobeying parental curfews or engaging in substance use represents a statement of maturity by these 'maturity gap' adolescents when it cannot be obtained by legitimate – socially acceptable – means.

Legitimised experience of adult respect and responsibility is identified as one potentially protective factor, serving to initiate the adolescent into social adulthood (Moffitt, 1993). This access to adult privilege means that the discrepancy between subjective age and social role is lessened, thereby obviating the need for the statement of independent agency

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made by engagement in problem behaviour. With regard to Transition Year, it might be expected that improved personal relationships with teachers could fulfil a similar function, as could the experience of work placements and more 'adultlike' interactions in real working environments as part of their work experience. Though Moffitt's theory remains influential, it must be noted that a host of other personal and familial characteristics are also associated with the development of antisocial behaviour in adolescence (Galambos, Barker & Almeida, 2003; Roisman, Monahan, Campbell, Steinberg, Cauffman & NICHHD, 2010).

Pseudomaturity of this nature – where adolescents engage in adult behaviours without adult perceptions or understanding – is empirically observable. Galambos and her colleagues have studied subjective age, or self-perceived maturity, in conjunction with measures of problem behaviour and with psychosocial maturity (self-reliance, work orientation and identity) to form cluster profiles of adolescence. These studies support the existence of three hypothesised developmental profiles (Barker & Galambos, 2005; Galambos & Tilton-Weaver, 2000). *Mature* adolescents report low levels of problem behaviour, high levels of psychosocial maturity, and a subjective age slightly higher than their chronological age. *Immature* adolescents engage in little problem behaviour, have low levels of psychosocial maturity, and feel younger than they are and younger than their peers. *Pseudomature* adolescents, or *adultoids*, have high levels of problem behaviour, are psychosocially immature, more physically mature, and feel older than their age.

Adultoids, more prevalent in middle than early adolescence, also tend to have a strong desire to be older, a low level of school involvement, and expect adult privileges – such as time without supervision – earlier than their peers do (Galambos, Barker & Tilton-Weaver, 2003; Galambos & Tilton-Weaver, 2000). In short, pseudomature students are caught in a maturity gap – they want to be adult but do not have an accompanying level of psychological maturity, in contrast to their immature peers (who are relatively childlike), and mature adolescents (who are growing up at a more developmentally appropriate rate). Barker and Galambos (2005) suggest that pseudomature adolescents' participation in problem behaviours represent an attempt to realise their conceptions of adult freedom and fun, in line with Moffitt's (1993) theory.

Adolescents' own ideas of maturity overlap with these profiles. Qualitative analyses of 6th and 9th grade student responses (equivalent to Sixth class and Third Year in Ireland) suggest that views on what 'being mature' entails encompass *genuine maturity* (whereby an adolescent demonstrates self-reliance, responsibility, industriousness, emotional awareness, communication, tolerance, fun; 49% of respondents); a *focus on privileges* (engages in adult

behaviours with older peers, dresses older, is irresponsible; 25%); a *focus on status* (assumes a mature status and is bossy or controlling, without the social acquiescence of peers; 12%); a *focus on responsibility* (takes on an inappropriate level of responsibility, is overly serious and unable to have fun; 8%); and a *focus on physical development* (is taller, stronger, more pubertally advanced; 6%) (Tilton-Weaver, Vitunski & Galambos, 2001). In other words, half of the student sample defined maturity in the same way that adults do, while another quarter of adolescents considered pseudomature peers to be grown-up. Students in 6th grade tended to regard 'privilege' as synonymous with maturity more often than 9th graders did (35% vs. 17%, respectively), while 9th graders were more likely to volunteer conceptions of genuine maturity than 6th graders (60% vs. 34%). These patterns suggest that students' views of maturity change and develop as they do.

Turner, Runtz and Galambos (1999) report that teenage girls who had suffered sexual abuse had a higher subjective age than a matched sample of non-abused girls, even after controlling for pubertal maturation (onset of menarche). Turner and colleagues speculate that, as a result of having lost their childhood prematurely, the abused girls' feelings of comparative adulthood may be a factor in the behavioural and psychological problems often later reported by abuse victims. In a similar vein, adolescent children of divorced parents often experience a higher subjective age in cases where their parents seek support by talking to them about financial concerns and job frustrations (Koerner, Kenyon & Ranking, 2006). The 'adulthood' conferred by being relied on emotionally by their parents may push the teenagers to grow up more quickly, and to feel older and more mature than their peers.

Subjective age represents a unique functional marker of development in adolescence. It explains variance in behaviour even when chronological age and biological age (pubertal status) are taken into account (Galambos et al., 1999). Although it is, unsurprisingly, unrelated to cognitive performance (Galambos, MacDonald, Naphtali, Cohen & de Frias, 2005), older subjective age is associated with several markers of adulthood, such as alcohol use, drug use, sexual experience and earlier age at first sex (but not to contraceptive use or number of sexual partners; Arbeau et al., 2007). In the first longitudinal study of adolescent behaviour and subjective age, Galambos et al. (2009) show that involvement in these adult activities precedes later increases in subjective age, which suggests that engaging in 'grown-up' behaviour reinforces feelings of maturity rather than vice-versa. Among emerging adults, higher subjective age is positively associated with life satisfaction (Montepare & Lachman, 1989).

Despite the work done in the last decade, further research is needed to consolidate an understanding of subjective age and developmental change in adolescence, and to incorporate this understanding in practice by facilitating a positive transition to adult roles for students (Galambos et al., 1999; Montepare, 2009). In Ireland, Transition Year is explicitly intended to support this transition and, indeed, both students and teachers frequently cite a greater feeling of maturity as being among the key benefits to TY participation (Jeffers, 2007a; Smyth et al., 2004). However, no attempt has been made to investigate this through quantitative measurement. In this light, students' subjective age can be considered as a generalised indicator of the extent to which they consider themselves to be 'mature', and examined with regard to their participation in Transition Year.

2.5 Life satisfaction

The positive psychology movement calls for a greater emphasis on promoting wellbeing and human strengths at all stages of the lifespan, in contrast to psychology's historical focus on treating problems and negative behaviours (Diener, 2009; Linley, Joseph, Harrington & Wood, 2006; Meyers & Meyers, 2004; Seligman & Csikszentmihalyi, 2000). In line with these calls, the study of happiness, operationalised as *subjective wellbeing* (SWB), has been the focus of a growing body of literature since the early 2000s (Rusk & Waters, 2013). More recently, the term 'positive education' has been used to describe the application of positive psychology in a school context (Kristjánsson, 2012; Norrish, Williams, O'Connor & Robinson, 2013; Seligman et al., 2009; White, 2016).

2.5.1 Overview

SWB is composed of three conceptually distinct components: positive affect, negative affect, and life satisfaction, which is also sometimes referred to as perceived quality of life (Diener, Suh, Lucas & Smith, 1999). *Positive affect* refers to the frequency of experienced positive emotions, such as pride or joy, and *negative affect* to the frequency of experienced negative emotions, such as fear or anger. In contrast, *life satisfaction* is a more cognitive appraisal of one's satisfaction with his or her life. All three facets of SWB represent cornerstones of the hedonic approach to studying wellbeing (Dagenais-Desmarais & Savoie, 2012), in contrast to the eudaimonic perspective provided by self-determination theory (see Section 2.1.2).

Previous research on life satisfaction has drawn on three distinct, but related, conceptual frameworks of the construct. These frameworks can be categorised as either unidimensional (encompassing general life satisfaction and global life satisfaction) or multidimensional. Unidimensional models assume that one's life satisfaction can be

represented by a single aggregated score. *General life satisfaction* is taken to be the sum of satisfaction scores across a range of specified domains (e.g. self, school, family). In contrast, *global life satisfaction* is assessed using context-free items, putting the onus on respondents to answer the items as they interpret them. As an example of the difference between global and general items, consider: *I have a good life* versus *I have a good family life* (Huebner, 2004).

A multidimensional framework takes greater account of domain-specific life satisfaction reports, and assumes that each domain can provide unique information that would be lost if summed to a general score. The multidimensional approach emphasises the utility of using a range of domain-specific measures to build an overall picture of life satisfaction. For example, a person might report very high satisfaction with their family life but a low level of satisfaction with school. Huebner and his colleagues favour a hierarchical model with five separate domains – family, friends, school, living environment, and self – feeding into a general life satisfaction factor (Huebner, Laughlin, Ash & Gilman, 1998). Assessing life satisfaction specific to these domains can provide additional information and a more comprehensive evaluation than one derived solely from global life satisfaction reports (Haranin, Huebner & Suldo, 2007). For instance, the increased specificity of multidimensional measures allows for the possibility of more targeted intervention or health promotion programmes.

2.5.2 Satisfaction with school

One particularly relevant subdomain with regard to the current research is school satisfaction. *School satisfaction* represents the "subjective, cognitive appraisal of the perceived quality of school life" (Baker, Lilly, Aupperlee & Patial, 2003). It can be considered analogous to the concept of job satisfaction in an adult context.

In relation to school and classroom characteristics, students' school satisfaction is strongly associated with the perceived quality of student-teacher relationships and with a supportive classroom environment (Baker et al., 2003; Suldo et al., 2006). Jiang, Huebner and Siddall (2013) investigated this further through a direct comparison of the relative influence of various sources of school-related social support – namely, the teacher-student relationship itself, peer support for learning, and parental support for learning. Their results showed that the teacher-student relationship was, by some distance, the strongest predictor of students' satisfaction with their experience at school. Alongside positive personal relationships between teachers and students, other characteristics of the learning experience that are identified as being associated with greater school satisfaction include an orderly and

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disciplined environment, a sense of connectedness and involvement in the school community, and perceptions that the academic expectations for students are clear and supported by teaching staff (Zullig, Huebner & Patton, 2011).

In line with self-determination theory, practices that support students' sense of competence and autonomy in the classroom might also be expected to enhance school satisfaction. Such practices – for example, opportunities to engage in co-operative yet self-directed learning – have been identified as occurring more frequently in Transition Year settings than at other grade levels in Irish education. Some support for this position has been reported by Tian et al. (2014), who found that measures of autonomy, competence and relatedness were associated with school satisfaction six weeks later (controlling for initial levels of school satisfaction). In addition, initial satisfaction with school was found to predict subsequent changes in all three psychological needs (controlling for initial reports of autonomy, competence and relatedness).

The latter finding is consistent with Fredrickson's (2001) broaden-and-build theory, supporting a reciprocal model of positive personal development and wellbeing at school. That is, the positive experience that was expressed by students through initial reports of high school satisfaction may have had the effect of promoting engagement with schoolwork and positive interactions with teachers and peers on an ongoing basis, which in turn supported the fulfilment of the three core psychological needs of self-determination. However, to date, direct examinations of the links between self-determined learning and school satisfaction are rare.

2.5.3 Associated outcomes

Life satisfaction reports tend to be positive at all ages, but have been noted as declining somewhat over the adolescent years (Gavin, Molcho, Kelly & Nic Gabhainn, 2013; Proctor, Linley & Maltby, 2009; Shek & Liu, 2014). For example, Irish research has found that life satisfaction is lower among late adolescents than among younger children and early adolescents (Gavin, Keane, Callaghan, Molcho, Kelly & Nic Gabhainn, 2015), and lower among senior cycle students than among First and Second Year students (Dooley & Fitzgerald, 2012).

The effects of gender and socioeconomic status on reports of global life satisfaction tend to be small in the international literature (Huebner, 2004; Proctor et al., 2009; Saha et al., 2014; Seligson, Huebner & Valois, 2003). However, some modest differences in favour of girls have been found in the US with domain-specific measures of school satisfaction (Huebner, Drane & Valois, 2000; Long, Huebner, Wedell & Hills, 2012). In Ireland, Gilman et al. (2008), using a multidimensional measure, found that Irish girls reported greater general life satisfaction and greater school satisfaction than their male peers. However, single-item (global) measures have reported higher rates of life satisfaction among Irish boys (Dooley & Fitzgerald, 2012; Gavin et al., 2015). There is therefore some evidence of greater satisfaction at school among girls, but more mixed evidence in relation to broader measures of life satisfaction.

Measures of academic achievement in school are not usually directly associated with global life satisfaction (Baker et al., 2003; Huebner, Ash & Laughlin, 2001). However, some studies have shown a link between subjective wellbeing, incorporating life satisfaction, and academic performance (Suldo, Thalji & Ferron, 2011), while Huebner and Gilman (2006) have reported a positive association between GPA and domain-specific school satisfaction. It should be reiterated that school satisfaction and life satisfaction are related, but distinct, constructs. The latter finding does perhaps lend weight to Suldo, Riley and Shaffer's (2006) assertion, following a review of relevant literature, that "current data are necessary prior to concluding that life satisfaction is unrelated to academic achievement."

More broadly, life satisfaction reports from adolescents show relationships with a wide range of positive and negative indicators of psychosocial development and wellbeing. Moderate negative correlations have been reported with measures of depression, anxiety, feelings of inadequacy, alienation from school, risky sexual behaviours, smoking, and substance abuse (Huebner, Funk & Gilman, 2000; Natvig, Albrektsen & Qvarnstrom, 2003; Proctor et al., 2009). Furthermore, both global (Lyons, Huebner, Hills & van Horn, 2013; Shaffer-Hudkins, Suldo, Loker & March, 2010) and multidimensional life satisfaction reports (Haranin et al., 2007) have shown significant associations with problem behaviours in adolescence. This is the case for both internalised (e.g., being withdrawn or anxious) and externalised (e.g., aggression or delinquency) behaviours.

On the other hand, positive correlations have been reported with self-esteem, selfconcept, academic self-efficacy, school engagement, positive relationships with others, perceptions of support from teachers, good relations with parents, and physical health (Chang, McBride-Chang, Stewart & Au, 2003; Huebner, Funk & Gilman, 2000; Leung & Shang, 2000; Natvig, et al., 2003; Proctor et al., 2009; Salmela-Aro & Tuominen-Soini, 2010; Shaffer-Hudkins et al., 2010; Suldo et al., 2006). Life satisfaction measures have also been shown to correlate positively with a comprehensive EU-wide composite index of wellbeing, which incorporated disparate factors such as education, material resources, risky behaviour,

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subjective well-being, housing and environment, health, and personal relationships (Bradshaw, 2009; Bradshaw & Richardson, 2009). In terms of future wellbeing, there is longitudinal evidence from New Zealand that social competencies in adolescence (including high life satisfaction) are stronger predictors of wellbeing in adulthood than students' academic strengths (Olsson, McGee, Nada-Raja & Williams, 2013).

With particular regard to the educational environment, students' satisfaction with school tends to be positively related to their global life satisfaction (Huebner & Gilman, 2006; Piko & Hamvai, 2010). Beyond that, school satisfaction is also associated with a range of positive and negative outcomes. For example, students who are happy at school are found to express higher educational aspirations (Geckova, Tavel, van Dijk, Abel, & Reijneveld, 2010). High school satisfaction has been positively associated with self-esteem, 'personal adjustment' – comprising self-reliance, interpersonal relationships, self-esteem, and relations with parents – lack of depression, wellbeing, and hope (Huebner & Gilman, 2006; Katja, Päivi, Marja-Terttu & Pekka, 2002; McGrath, Brennan, Dolan & Barnett, 2009; Rask, Astedt-Kurki, Tarkka & Laippala, 2002). Conversely, low levels of school satisfaction are associated with a greater risk of early school leaving, lower academic achievement, poorer wellbeing, poorer interpersonal relationships, and behavioural problems (Elmore & Huebner, 2010; Huebner et al., 2001; Katja et al., 2002; Whitley et al., 2012).

2.5.4 Calls to monitor life satisfaction

Life satisfaction, both in its global conceptualisation and in domain-specific forms, is now recognised as being a valuable psychological asset (Lent, 2004; Proctor et al., 2009). For example, Lyubomirsky, King and Diener (2005), in a comprehensive and widely-cited treatise, present compelling evidence that 'happiness' – incorporating several measures of life satisfaction and closely related constructs in their review – often precedes success in a range of domains, counter to the widely-held directional assumption that success breeds happiness. That is, they found that individuals who are happier, are more satisfied with their lives, and express greater positive emotions tend to become more successful than individuals who do not (even while controlling for other psychosocial assets that also precede success, such as good social skills). This relationship was shown to hold across a number of categories of outcomes in which individuals could be described as 'successful', including their health, social relationships, and working lives.

Following the growing recognition of the value of positive cognitive and affective self-evaluations of one's life, there have been increasing calls for more regular monitoring of

life satisfaction among adults and adolescents, both in Ireland (Brooks & Hanafin, 2005; Hanafin et al., 2012; Hogan & Broome, 2013) and abroad (Diener, 2000; Dolan, Layard & Metcalfe, 2011; Huebner et al., 2004; Proctor et al., 2009; Richardson, 2009). Measures of life satisfaction can be used by governments and other organisations, for example, to aid the development and assessment of intervention and health promotion programmes, in assessing mental health and wellbeing, and as a means of moving measures of national and international social development beyond simple economic factors (Cummins, Lau, Mellor & Stokes, 2009; Helliwell, 2008; Huebner et al., 2004). With specific regard to the educational environment, it has been suggested by several researchers – based on consistent links between students' life satisfaction reports and other indicators of adaptive development – that student reports of wellbeing in school could be useful as a general marker of a positive learning environment that successfully promotes academic and social development (Antaramian, Huebner & Valois, 2008; Hascher, 2008; Suldo, Shaffer & Riley, 2008).

Moreover, notwithstanding its utility as a general marker of adaptive development, life satisfaction is a key measure of wellbeing and must be seen as an important outcome in its own right. Whitley et al. (2012) suggest that adolescents who have a positive experience of school life and express high school satisfaction may be more likely to view their relationships outside school (e.g., with parents, peers, and family) in a more optimistic manner. In other words, as far as social relationships are concerned, happiness - even in other domains - promotes more positive relations. Given that adolescent students spend a substantial portion of their daily lives in school or dealing with school-related matters, such as homework or extra-curricular activities, promoting high levels of school satisfaction could be considered a goal of some significance. Following this line, McGrath et al. (2009) call for a more deliberate consideration of students' satisfaction with school, noting that "programme developers and policy makers would do well to encourage programmes that contribute to school satisfaction and enhance the overall 'activeness' of school culture." Soutter et al. (2011) similarly call for a greater understanding of the role of educational experiences in shaping adolescent wellbeing, observing that research to this end would have much to contribute to educational policy.

With regard to educational policy in Ireland – and to Transition Year in particular – it is noteworthy that the Government White Paper on education (Dept. of Education, 1995), describes Transition Year as being a programme that educates students for "the demands and pleasures of life, work, sport and leisure" (p. 53). The inclusion of 'life', sport and leisure as relevant topics for consideration alongside work are important insofar as they expand the

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consideration of what a successful outcome to the programme might be beyond the acquisition of practical or work-oriented skills. The recognition that a formal education might be expected to prepare students for the pleasures of life after school, as well as the challenges, presents students' wellbeing as a factor that is worthy of consideration alongside academic and social development. Helliwell and Putnam (2004) state this case elegantly through their observation that "a *prima facie* case can be made that the ultimate dependent variable in social science should be human well-being, and in particular, well-being as defined by the individual herself, or subjective well-being". In more practical terms, Richardson (2009) notes the need for national bodies to engage more in "regularly collect[ing] more high quality information on children's well-being that is nationally and internationally comparable" as a key step in the promotion of child and youth wellbeing.

In the current research, the inclusion of measures of life satisfaction provide both global and domain-specific (satisfaction with self and satisfaction with school) estimates of wellbeing. These indicators are less closely tied to qualitative accounts of Transition Year outcomes than constructs such as social self-efficacy or subjective age, which have clear correspondances with the findings of previous studies (Irish Second-level Students' Union, 2014; Jeffers, 2007a; Smyth et al., 2004). Nonetheless, in light of Fredrickson's (2001) broaden-and-build theory and international calls for greater monitoring of student wellbieng, it is worth exploring whether any changes in life satisfaction are observed alongside the benefits that are reported to accrue to TY participants in other respects (enhanced maturity, greater confidence, etc.), and in that way to examine the potential role of the Transition Year programme in supporting Irish students' wellbeing.

2.6 Relationships between the selected constructs

The research reviewed in the preceding sections is summarised in Table 2.1, which shows the general nature of the bivariate relationships between the selected psychosocial constructs in adolescence, together with students' gender, age or grade level, and academic achievement. Findings from the international literature are shown below (to the left of) the grey diagonal line, and findings pertaining specifically to Ireland are shown above (to the right of) the diagonal line.

As is clear from the reviews presented above, previous research has tended to find positive associations between the socioemotional variables under examination here, with more mixed findings with regard to gender and age differences. For example, Suldo et al. (2008) report positive links between students' academic achievement, attachment to school, relations with teachers, school satisfaction, and global life satisfaction. A wider range of information is available in relation to some constructs (in particular, engagement and life satisfaction) than others although, as noted above, the engagement literature is also notable for the variety of terms and measures used to address broadly similar concepts.

Relatively little is known in the Irish context about the nature or extent of the relationships between the selected constructs, as is evident from Table 2.1. Some work has been done on examining engagement and life satisfaction – and social self-efficacy, albeit in Northern Ireland – with regard to students' demographic characteristics (gender and age/grade). This study seeks to contribute to the research base by establishing the nature of these relationships among Irish adolescents, thereby providing a source of information for use within Ireland and for more direct comparisons with the international literature.

	Student engagement	Social self- efficacy	Psychosocial maturity	Subjective age	Life satisfaction	Gender	Age/ grade	Academic achievement
Student engagement						possibly – for boys	possibly – at upper grades	+
Social self- efficacy	+							
Psychosocial maturity								
Subjective age	mixed	+	mixed					
Life satisfaction	+	+	+	+		mixed	 for older adolescents 	/
Gender	possibly – for boys	mixed	mixed	/	/		/	mixed
Age/grade	mixed	/	+	+	/	/		– for older students within grade
Academic achievement	+		+		+ for school sat.	mixed	mixed	

International research findings appear <u>below the diagonal</u>. Irish-specific research findings appear <u>above the diagonal</u>.

"+" and "-"indicate evidence that the intersecting constructs <u>are associated</u> positively or negatively.

"/" indicates evidence that the intersecting constructs are not associated or associated only weakly.

"" indicates a lack of sufficient published evidence with regard to the intersecting constructs.

2.7 Relevance of the selected constructs to Transition Year

This section summarises the observations made earlier in this chapter, and in Chapter 1, with regard to the specific relevance of the chosen psychosocial indicators to the Transition Year programme. Constructs are broadly described in terms of their conceptual or empirical relevance (Table 2.2).

- *Conceptual relevance* is taken to mean that the selected construct reflects an intended outcome of student participation in the programme, as stated by the official Transition Year Guidelines (Dept. of Education, 1993) or similar documentation.
- *Empirical relevance* means that the selected construct has been identified as an outcome of participation by the extant, largely qualitative, research on Transition Year, but where the extent of the association between TY participation and the outcome is unclear or unknown.

Construct	Intended outcomes (conceptual)	Reported outcomes (empirical)
Student engagement (student-teacher relationships; affective belonging/relatedness; cognitive engagement in lessons)	TY participants "should be better equipped and more disposed to study than their counterparts who did not have the benefit of this year."	Stronger relationships; TY participants are more focused and better able for LCE classes (reported by students & teachers).
Social self-efficacy	"Increased social competence."	Enhanced social confidence (reported by students, teachers, parents).
Self-reliance; work orientation	Becoming "autonomous, participative, responsible members of society."	Greater functional maturity (reported by students, teachers, parents).
Subjective age	"Education for maturity."	Stronger perceptions of oneself as a mature person (reported by students).
Life satisfaction; school satisfaction	Student wellbeing as young members of society (White Paper, 1995).	-

Table 2.2: Correspondences between the selected constructs and intended/reported TY outcomes

Quotations are taken from the Transition Year Guidelines (Dept. of Education, 1993).

Although engagement is not explicitly identified by the official Guidelines as an expected outcome of TY participation, the ASTI's own guidelines for teachers note the importance of "[striking] a balance between learning and the enjoyment that should be part of education for both teachers and students" (ASTI, 1993, p. 13), providing quite a reasonable description of engagement in practice. It is interesting to note, as an aside, that

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the ASTI see the chance to engage teachers, as well as students, through participation in the programme. The unique structure of the year provides teachers, in the absence of high-stakes examinations and a centrally-prescribed curriculum, with the opportunity to engage students in (and out of) the classroom in novel ways. For example, teachers of Transition Year classes are encouraged to consult with students in planning the programme and to offer opportunities for project- and activity-based learning and group work (ASTI, 1993; Dept. of Education, 1993). Transition Year classes tend to involve more group work and discussion-based learning, possibly facilitating the development of student-teacher relationships in TY and into the Leaving Certificate years which, in turn, may support students' affective and behavioural engagement.

Social self-efficacy is included here on the basis of both conceptual and empirical relevance. The Guidelines (Dept. of Education, 1993) refer to "increased social competence" and the fostering of "effective interpersonal communication and relationships" as intended features of TY participation, while the preparation of students for autonomous and active participation in society, including social dimensions, is emphasised throughout. In practice, increased social confidence and participation have been highlighted by students and teachers as positive outcomes arising from the Transition Year experience (Jeffers, 2007a).

The fostering of maturity is a key component underpinning the rationale for the Transition Year (ASTI, 1993; Dept. of Education, 1993). The evidence suggests that the programme is indeed perceived as facilitating such personal development among participants (Jeffers, 2007a; Smyth et al., 2004; Transition Year Curriculum Support Service, 2000), although this evidence has generally been expressed in broad terms (e.g., 'personal development', 'maturity') in previous research. Self-reliance and work orientation have been selected as the operational manifestations of psychosocial maturity in this study. This is primarily in recognition of their conceptual relevance to the description of maturity envisaged by the Guidelines (Dept. of Education, 1993), which includes students' attainment of "greater responsibility for their own learning and decision making" and the development of "an awareness of the value of education and training". The Guidelines suggest direct experience of real workplaces through work experience placements and the development of decision-making and group-related skills through project work as having the potential to foster these competencies.

The concept of subjective age does not appear in official documentation regarding the programme and, indeed, has not previously been studied in the Irish context at all. However, the international literature on young people's perceptions of themselves relative to

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their peers identifies subjective age as an important marker of development, particularly with regard to interactions and crossover between the adolescent and adult worlds such as that provided by TY. In this sense, subjective age can be regarded as a marker of students' own feelings of 'being mature' in a general sense. References by TY participants to feeling more mature and more grown-up after taking part in the programme (Jeffers, 2007a; Smyth et al., 2004) point to the relevance of investigating patterns of subjective age development in Irish schools with regard to participation in TY.

Finally, the study of life satisfaction reflects the aspiration expressed in the White Paper on Education (Dept. of Education, 1995) that the Transition Year programme should contribute to an appreciation of the "demands and pleasures" (p. 53) of life both within and outside of the school environment. The White Paper provides a commitment to an awareness of the concept and development of wellbeing in the Irish education system, with particular relevance for the opportunities provided by Transition Year to support and maintain wellbeing. There is little additional evidence available with regard to relationships between life satisfaction and other markers of positive development in Ireland. For these reasons, a more detailed investigation of life satisfaction in the context of Irish upper secondary education, and in particular in relation to the social and personal development attributed to the Transition Year programme, appears to be warranted.

The next chapter, Chapter 3, describes the implementation of the empirical study that was set up to address these questions.

Chapter 3: Design and implementation

This empirical study seeks to examine the extent to which Transition Year participation is associated with positive indicators of psychosocial development and wellbeing. This aim is addressed through the use of repeated measures that allow changes over time to be measured quantitatively and related to students' participation in TY. It is intended that the generalisability of the findings will be strengthened through the use of a nationallyrepresentative sample of students.

The following sections describe the steps taken towards answering the research questions. Section 3.1 outlines the conceptual framework of the study. Section 3.2 summarises the procedures and outcomes of a pilot study, carried out in 2010. All subsequent sections deal with the main phase of the study. Section 3.3 details the sampling methodologies and administrative procedures, including the provision of information regarding the study and seeking consent from participating students. Participation rates are also described here. Section 3.4 describes the process used to link students' data longitudinally across waves. Section 3.5 details the measures included in the questionnaires that were completed by participating students. This section describes the item and response formats, and includes missingness¹¹ rates and information for each variable. Finally, Section 3.6 provides a brief account of data checks and a bias analysis, carried out to ascertain the quality of the final dataset.

3.1 Conceptual framework

The issues discussed in Chapter 1 underpin the conceptual framework for this study. Figure 3.1 presents, along the left-hand side, a simplified¹² depiction of movement through the education system by two groups of students: those who take part in Transition Year between the junior cycle and senior cycle, and those who do not. Along the right-hand side, some of the factors at each stage that may be differentially associated with Transition Year participation are highlighted.

¹¹ 'Missingness' is the accepted term in the literature for referring to missing data (see, e.g., Carpenter & Plewis, 2011; Graham, 2009; Schafer & Graham, 2002).

¹² 'Simplified' because it does not refer to, for example, early school leaving, where students may leave at any point along the depicted sequence.

For example, following completion of the common junior cycle, student characteristics may influence the choice to take part in Transition Year or to skip the programme (examined in Chapter 4), as denoted by the inward-facing arrow. Student characteristics and their experience of school to date may also interact with their characteristics of their school's TY programme (such as timing of LCE subject choices, availability of particular activities, and relationships with teaching staff) as influences on their choice to participate. In some schools, this interaction is likely to also be shaped by school policy and staff in the sense that some students may be encouraged 'into' or 'away from' the programme (Jeffers, 2015; Smyth et al., 2004). This is represented by the inward-facing arrow leading from the characteristics of the school to students' participation in TY.

During Transition Year, novel experiences may be related to subsequent personal development, with any given student's experience dependent on a range of factors including the characteristics of their school's TY programme, the activities and classes experienced within school during the extra year, the increased opportunities for out-of-school experiences facilitated by the absence of high-stakes examinations, and so on. Insofar as these factors may play a role in the outcomes associated with participation in TY, they are represented here by outward-facing arrows going 'back' towards the student.

Beyond Transition Year, both participants and non-participants progress along similar pathways through the senior cycle which results, for most students, in one of the Leaving Certificate qualifications (LCE, LCVP, or LCA). As noted in Chapter 1, TY participants tend to perform more strongly than non-participants in the Leaving Certificate, although the role of TY participation in these results is unclear. Following completion of second-level education, all of these young adults integrate with and participate ever more closely in 'adult' and civic society, with further education, employment and career progression, personal goals and achievements, social and collegial relationships, and broader participation in society coming to the fore. There has been very little research on the longerterm impact of participation in Transition Year, as participants move beyond school into adult life, and these issues do not typically feature in discussions around TY. Nonetheless, the stated aims of the programme suggest that long-term or distal outcomes of this nature were regarded as relevant by the programme developers (Dept. of Education, 1993). With that in mind, the 'enduring legacy' of Transition Year participation is represented in this framework.

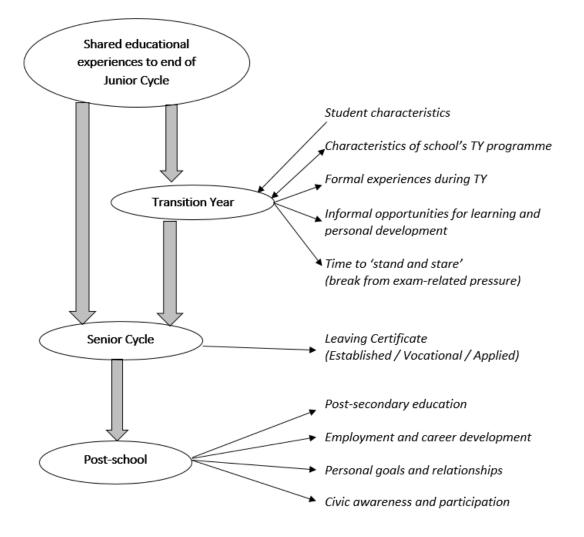


Figure 3.1: Conceptual framework of the study

Figure 3.1 depicts an overarching view of Transition Year's place in the education system and on several issues for consideration in a comprehensive perspective of the programme. This study focuses particularly on the period of time from the end of the junior cycle to the end of Fifth/Sixth Year, encompassing TY participation where applicable. Mapped onto the framework above, it follows the movement of students from the first stage (shared experiences to the end of the junior cycle) to the third stage (senior cycle). For some participants, this movement includes the second stage (Transition Year) while, for others, it does not. As noted in the introduction to Chapter 2, longer-term outcomes, such as those depicted in the fourth stage of the framework, were not considered for this study. The factors under investigation here are those relating to selection into Transition Year, students' varying perceptions and experiences of the programme across different schools, and repeated measurement of selected psychosocial outcome variables. Specifically, the study was primarily designed to follow the longitudinal development of a cohort of students over three years, starting in Third Year, with particular focus on inter-individual differences and intraindividual changes observed in relation to participation or non-participation in the Transition Year programme.

Longitudinal research provides many advantages over cross-sectional studies – or even multi-wave studies that are not truly longitudinal (for example, because different participants or different measures are used in each iteration) – but the longitudinal structure is also accompanied by a range of additional difficulties and complications. Among the major difficulties are the extended timeframe necessary for multiple waves of data collection compared to simpler 'one-shot' cross-sectional studies, uncertainty as to whether the area of interest at the beginning of the research will still be relevant by the end of the study, and the need to secure the time, resources, and stakeholder interest required to maintain the study over several years (White & Arzi, 2005). Technical complications pertaining to the maintenance of accurate records, ensuring comparable measures in each wave, the management and linking of databases, and potential biases introduced by participant dropout over time (attrition), are also serious issues to consider and prepare for (Ludlow, Pedulla, Reagan, Enterline, Cannady & Chappe, 2011; Warner-Smith, Loxton & Brown, 2007).

On the other hand, if these issues are resolved to a satisfactory degree the resulting data can provide valuable information on the extent and nature of change over time, the examination of temporal influences (X preceding Y), and a deeper understanding of human development (Collins, 2006). From this perspective, longitudinal research can be considered "the study of *what happens* rather than *what is*" (Roe, 2008, p. 41). Studies examining 'what happens' are relatively rare in the educational and psychological literature, and have thus been the focus of repeated calls for greater investment in the collection of longitudinal data (e.g., Roe, 2008; White & Arzi, 2005).

Figure 3.2 shows the participating year groups at each of the three waves of data collection used for this research, along with the movement of particular groups of students across grade levels between waves. In each participating school, the named year groups were invited to take part in the study. As shown by the solid lines, students in Third Year in 2011 were included as intended participants in 2012 (whether they progressed to TY or directly to Fifth Year) and again in 2013 (in Fifth Year or in Sixth Year). Students who were in TY in 2011 (Wave 1) may also have participated in subsequent waves alongside their new classmates: the 2011 Third Year students who chose to skip TY. The broken line from Third Year in Wave 2 indicates that only some of those students were eligible to participate in

Wave 3; those who moved directly to Fifth Year would have been included in Wave 3, even though their classmates who had moved to Transition Year were not.

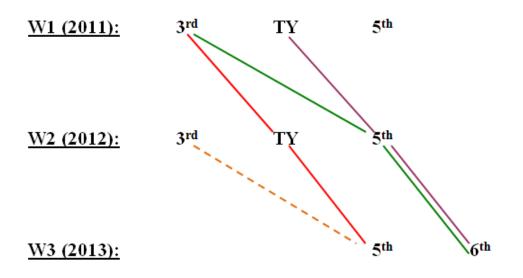


Figure 3.2. Movement of participating students from Wave 1 to Wave 3

For this longitudinal study, the group of students who were in Third Year in Wave 1 are of key interest. Whether or not they chose to take part in TY, this cohort is the only one to have been eligible for both of the subsequent waves – thereby providing complete longitudinal information across the three years – with responses given in the first wave predating their participation or non-participation in Transition Year. This is important because it means that any changes over time that may be associated with TY participation can be separated out from pre-existing characteristics and attitudes. In this way, the attitudes and opinions of classmates in Fifth Year and in Sixth Year can be more clearly compared and related to their previous participation, or not, in the extra year.

3.2 Pilot study

A pilot study was carried out in October 2010.¹³ Two schools in the greater Leinster area took part in the pilot study – one with a compulsory TY programme and one with an optional TY. In both schools, one class group at each of Third Year, Transition Year, and

¹³ An extended version of this account of the pilot study is included in Appendix E. It includes information on scale reliabilities and additional feedback from students.

Fifth Year took part in the survey. The questionnaires were administered by the researcher to three class groups and by the usual class teacher to the other three. For all class groups, both the researcher and the teacher were present at all times. Students were first given an information sheet explaining the aims of the study and were asked to read the information before reading an informed consent form. The purpose of the study was also explained verbally to them. In addition, students were encouraged to report anything that they found confusing, irrelevant, or otherwise didn't like. Altogether, 136 students (100%) consented to take part.

In both schools, most students appeared to engage well with the questionnaires. Several days after the pilot, students were asked to complete a short evaluation form with comments or criticisms of the survey. The main problem identified was the length of the questionnaire: 63% of respondents reported that the time taken to complete the questionnaire was *too long* for them, while 37% said that it was *ok*. No-one regarded it as being *too short*. Accompanying comments suggested that the questions retained students' interest in most cases, but that some students ran out of time towards the end. Additional comments made suggested instances where amendments or clarifications would be useful.

After analysis of the pilot study data was completed, a letter was sent to the principals thanking them for their school's participation and providing an overview of their students' thoughts on the Transition Year programme, as a gesture of appreciation and a source of information for the TY coordinator.

3.3 Main study

This section describes the procedures that were followed for the three waves of data collection that took place in 2011, 2012, and 2013.

3.3.1 Sampling

The sampling frame for this study comprised all second-level schools in Ireland offering Transition Year. This was defined as all schools that had at least one student enrolled in TY in the Department of Education and Skill's 2008/09 post-primary database of schools, the most up-to-date database available when the sample was drawn. In total, 553 schools¹⁴ were

¹⁴ One school was listed as having students in 'JC4', or a fourth year of junior cycle, which was judged here as being equivalent to Transition Year. This school accounts for the difference between the 553 schools in the 2008/09 sampling frame and the 552 schools counted as having TY students in the more systematic (long-term)

identified as having TY students, while 178 schools had no students in Transition Year in 2008/09. In order to achieve a representative sample of students, the 553 eligible schools were sorted by four implicit stratification variables: SSP/DEIS (designated disadvantaged) status, school type (secondary, vocational, community/comprehensive), school gender intake (boys, girls, mixed), and enrolment size. Schools were sampled with a probability proportional to size, such that schools with larger enrolments were more likely to be sampled, in order to ensure that a large enough sample of students could be reached.

Thirty schools were selected from this stratified sampling frame using a random start systematic sampling technique.¹⁵ About twenty clusters (schools) are recommended as a minimal sample size for clustered or multilevel analyses in order to allow for examination of between-group effects (Bland, 2010). However, it was expected that it would be difficult to secure a commitment to the longitudinal research from all selected schools given its status as a relatively large study, with no official backing from the Department of Education and Skills, that required repeated participation over a minimum three-year commitment period. By contacting thirty schools, it was considered likely that twenty participating schools could be achieved even in the event that some schools declined to participate.¹⁶ In addition, resourcing constraints militated against a sample larger than a maximum of thirty schools. Replacement schools were also selected as this stage, to be contacted in the event that any of the initially-sampled schools declined to participate. Replacement schools were those schools immediately preceding or following the sampled schools on a sorted list of the implicit stratification variables. Therefore, each replacement school had similar characteristics to an associated school from the original sample.

Initial contact was made with the principals of the sampled schools by letter in June 2010. The letter outlined the proposed research, informed them of their random selection for the study, and asked them to indicate their willingness to participate. This letter was accompanied by a letter from the national coordinator for the Transition Year Support

¹⁹⁹²⁻²⁰¹⁵ database shown in Table 1.1. The discrepancy provides an immediate illustration of some of the complications, referred to above, that can arise in longitudinal database management and record-keeping. ¹⁵ All schools were listed and assigned a number between 1 and 553. The sampling interval was first calculated by dividing the number of schools in the sampling frame by the number of schools to be sampled (553/30 = 18.433). A random 'seed' number was used to select the first school for the sample, with subsequent schools selected by adding 18.433 to its position in the list and taking the nearest school, and so on, until 30 schools were identified. The stratified nature of the sampling list ensured proportional representation by the categories described above.

¹⁶ For comparison, Freeney and O'Connell (2012) chose to sample 20 schools for their survey on early schoolleaving intentions among Junior Certificate students.

Service, indicating the TYSS's support for the research. Two schools declined to participate at this point, citing lack of resources following budgetary cutbacks. They were replaced by the replacement schools that were identified as part of the sampling procedure. A follow-up letter was sent in September 2010 to those principals who had not replied to the earlier contact. All schools were contacted again in February/March 2011, in order to re-confirm participation and outline the survey procedures in more detail.

The achieved participation rates of schools and students are described in Section 3.3.3 along with comparison to the broader national populations. Two differences between the drawn sample of schools and the achieved sample should be noted. First, five of the thirty selected schools initially agreed to participate but withdrew just before the first wave of data collection, citing time pressures on staff. These withdrawals occurred too late to contact and recruit replacement schools. Thus, twenty-five schools were sent materials (information sheets, consent forms, and questionnaires) in March 2011. Second, five of the twenty-five schools that agreed to participate and were sent survey materials did not return the completed questionnaires, despite repeated contact following the scheduled administration. Their students were therefore excluded from the final achieved sample of twenty schools.

Within participating schools, all students at Third Year, Transition Year and Fifth Year were invited to participate in the research for the first wave. Over the three planned waves of data collection, this format was designed to yield cross-sectional data at each grade level, and, crucially, full longitudinal data for the cohort of Third Year students in Wave 1. Clustering effects (the tendency for members of any group, such as students within a school, to share characteristics) mean that the effective sample size of student responses is smaller than the actual number of respondents who return questionnaires.¹⁷ Clustering effects result in a less efficient sampling method, in statistical terms, than drawing a simple random sample of equivalent size (Hedges & Rhoads, 2009). However, including all students in the administration has the advantage of reaching large numbers of students at little additional cost (i.e., administering to 80 students within a school is not much more expensive than administering to 40 students), yielding a deep dataset at relatively minimal incremental expense. In practical terms, asking all eligible students to participate also had the important effect of streamlining the collection of multiple waves of information from the same students

¹⁷ The concept of the effective sample size is discussed in greater depth in Section 3.3.3.

in 2012 and 2013, because teachers were not required to track (anonymous) subsamples of students as they moved between grade levels over the three years.

School and student response rates, as well as the effective sample size achieved in Wave 1, are calculated and discussed below.

3.3.2 Administrative procedures

The survey materials for Wave 1 were prepared for each school by the researcher and posted to schools in March for administration in March/April 2011. These survey packs included one questionnaire for each student in Third, Transition and Fifth Years, plus one consent form and one information sheet for each student.

Parental consent forms were prepared and offered to schools if they wished to use them and, in two cases, the forms were requested by the school coordinator and were included in the school pack. Otherwise, active parental consent was not sought by the researcher in this study as a default, with students instead given responsibility for deciding their (non-)participation. It is recognised that there are valid ethical arguments in favour of seeking parents' consent when children take part in research but also, in particular, that issues surrounding parental consent become more complex when adolescents are involved (see OMCYA, 2010, pp. 59-63, for a discussion of some of these issues). Here, the decision to prioritise active consent from students was taken for three main reasons. Firstly, the mid-tolate adolescents taking part in this study were considered as being competent, having the capacity, and having the right to decide their own participation in the survey, with the guidance of their teachers and the provision of information by the researcher (cf. Coyne, 2010; OMCYA, 2010; Santelli et al., 2003). Secondly, the content of the questionnaires related directly to students' own thoughts and opinions about themselves and their school without touching on any particularly sensitive topics (e.g., substance use or sexual activity) that might have warranted more parental oversight (if, for example, there was a risk of causing distress to participants). This is in line with the guidelines of the Society for Adolescent Medicine, which state that "for research of low risk (e.g., confidential or anonymous survey research), capacity [for adolescents to provide informed consent for themselves] can be assumed based on the reasonable expectation of capacity for the group of adolescents to be studied" (Santelli et al., 2003). It is also worth noting that the availability of the parental consent forms was discussed in this context with the principals/TY coordinators in other participating schools, who declined to use them for this reason.

Finally, requiring active parental consent in school-based research often leads to low response rates and biased samples, which usually under-represent disadvantaged and marginalised groups (Esbensen, Deschenes, Vogel, West, Arboit & Harris, 1996; Rojas, Sherritt, Harris & Knight, 2008). For this reason, insisting on parental involvement where it may not be a reasonable requirement for the protection of adolescent participants (Santelli & Rogers, 2002), as judged to be the case here, can "greatly endanger accurate information about programs" (Esbensen et al., 1996). A biased sample of this nature would greatly reduce the validity of the intended study and could lead to findings that are inaccurate, unreliable or misleading – which, if used to inform public policy on the basis of poor information, would hold the potential to cause unintended harm to future cohorts.

Questionnaires were colour-coded by year group (green, white or pink) for ease of handling and to reduce the possibility of administering the wrong version to a year group.¹⁸ The school coordinator – in all cases, either the principal or the Transition Year coordinator in the school – also received a letter outlining the procedures for administering and collecting the survey materials and a set of pre-paid postage labels for their return. The survey packs were sent to each school by courier. At this stage, information on the compulsory or optional status of the school's TY programme was also sourced from the school coordinator or secretary or from the school's website.

Following observations made during the pilot study and subsequent adjustments to the questionnaire, the coordinator in each school was advised that the survey should take no more than one class period for students to complete. They were given the option of administering the surveys to all students at a grade level at one time (e.g., at a weekly assembly), or to have them administered in class by the usual teacher. As the questionnaires were intended to tap into students' attitudes and opinions, and because minimising disruption to the cooperating schools was a concern, it was felt that this flexibility was appropriate.

Administering teachers were asked to distribute a questionnaire, an information sheet, and a consent form to each student in the three year groups.¹⁹ The information sheet introduced the proposed research as being a study of students' attitudes and opinions

¹⁸ The three versions of the questionnaire were mostly identical, containing the same multiple-choice items throughout, but offered different open-ended questions for each year group.

¹⁹ Copies of these instruments are available in Appendix B, Appendix C, and Appendix D.

towards school and towards Transition Year, organised by the researcher in his capacity as a member of staff at the Educational Research Centre.²⁰ The purpose of the questionnaire and the study were explained and students were invited to participate. Their ability to decide to decline to participate or to withdraw from the study was explained, and contact details for the researcher and for St Patrick's College were provided. The consent form reiterated the fact that participation was voluntary, that their responses would be anonymous, and that contact details were provided on the information sheet. Having read and understood the information, students were invited to sign the consent form and complete the questionnaire. Although the reading level of the questionnaires was designed to be accessible to most students, teachers were advised that they were free to give any clarifications required in the event that a question was not understood by the student.

The completed materials were returned to the researcher using the pre-paid postage labels provided. Two students in Wave 1 explicitly refused to participate, and another seven students returned questionnaires with evidence that the survey had not been engaged with in a genuine fashion (e.g., through written comments, or clear response patterns such as '1-2-3-4-5-4-3-2-1' throughout). These nine students (0.2% of the total) were removed from the dataset and were excluded from all subsequent tabulations and analyses.

The primary aim of Wave 2 was to follow up the Third Year students from Wave 1. Therefore, the target sample comprised all students in Transition Year and Fifth Year in 2012. The Fifth Year students in Wave 2 also, by necessity, included all TY students from Wave 1. With this in mind, the twenty coordinators who returned materials from the first wave were contacted again in December 2011 and January 2012 in order to maintain contact and guide preparation for the second wave of data collection.

Coordinators also received a letter that outlined a number of adjustments to the survey procedures following the experience of the first wave of data collection. Most notably, the consent form was integrated with the questionnaire booklet in order to reduce the amount of paper to be handled by teachers and to facilitate a smoother and more efficient administration. All of the content of the original consent form was retained, but, to enhance anonymity, students were asked to signal consent by dating the form with the date

²⁰ This work is ongoing as part of the ERC's Programme of Work, and can be viewed over the coming years at: <u>www.erc.ie/programme-of-work/transition-year-survey</u>.

of administration rather than by signing their name. In addition, the survey packs – booklets with integrated consent form, and information sheets – were posted to schools in February so that schools could administer the surveys in March, before the closure of schools for Easter at the beginning of April. This was several weeks ahead of the equivalent schedule in 2011. The administration instructions and procedures were, otherwise, the same as those described above for the first wave.

The administration of Wave 3 followed the same procedures as in Wave 2, in this case spanning the period from December 2012 to April 2013. The target grades for Wave 3 were Fifth Year and Sixth Year students.

Following completion of the survey, all school coordinators were sent a short report for their school that described their students' (averaged) views of the Transition Year experience in their school in comparison to the average for all twenty schools that took part in the study.

3.3.3 Participation rates and sample characteristics

This section details the study's participation rates, for each wave and overall, and discusses the representativeness of the achieved sample.

3.3.3.1 Schools

Three of the 20 participating schools were located in Dublin city or county, with six in the rest of Leinster, nine in Munster, and two in Ulster.²¹ The characteristics of schools in the selected and achieved samples (Table 3.1) are shown in terms of the categorical variables by which schools were stratified for selection: disadvantaged status (participation in the SSP/DEIS programme), gender (mixed or single-sex), and school type (secondary, vocational, or community/comprehensive), along with their primary language of instruction (Irish or English) and the total school enrolment size (categorised as small schools with fewer than 200 students and very large schools with more than 800 students, with the intermediate categories omitted for reasons of space).

²¹The absence of any schools from the Connacht region is a function of the random sampling process rather than a purposeful exclusion.

				Gender			Тур	e		Enrol	ment
	N	DEIS	Mixed	Boys	Girls	Sec	Voc	Comm/ Comp	Irish- medium	<200	>800
Achieved sample	20	4	11	5	4	13	5	2	2	1	6
Agreed to participate, but materials not returned	5	-	3	-	2	3	-	2	1	-	1
Initially agreed, but withdrew before Wave 1	5	-	2	1	2	3	1	1	-	-	1
	30	4	16	6	8	19	6	5	3	1	8

Table 3.1: School response rates by participation status, with school characteristics

Although the initial sample was drawn from a sampling frame that was designed to produce a representative depiction of the environments in which students experience Transition Year, the non-participation of ten selected schools introduced a potential source of bias into the achieved sample. To examine this possibility, the characteristics of the overall school population (all schools with TY students in 2008/09), the drawn sample (thirty schools) and the final achieved sample (twenty schools) were compared (Table 3.2).

It can be seen that the relative proportions of the stratification characteristics were broadly maintained in the achieved sample when compared to the original sampling frame. Large schools (>800 students) are more prevalent in the drawn (27%) and achieved samples (30%) compared to the underlying population (10%) because of the sampling technique, which intentionally gave larger schools a higher probability of being sampled. This was achieved at the expense of schools with intermediate enrolment sizes (84% of the population and 65% of the achieved sample), while the achieved sample of very small schools (5%) is broadly in line with population estimates (6%). Therefore, there is little evidence of substantive bias due to school non-participation at this point. It must be acknowledged that it is possible that the non-participating schools differed from participating schools on other, unrecorded, characteristics. Therefore, the characteristics of the achieved student sample are described next, with reference to the overall student population, in order to determine the representativeness of the participating students.

				Gender			Туре	9		Enrol	ment
		DEIS	Mixed	Boys	Girls	Sec.	Voc.	Comm. /Comp.	Irish- medium	<200	>800
Population (N = 553)	Ν	110	326	93	134	342	133	78	48	34	44
	%	20	59	17	24	62	24	14	9	6	10
Drawn	Ν	4	16	6	8	19	6	5	3	1	8
sample (N = 30)	%	13	53	20	27	63	20	17	10	3	27
Achieved sample (N = 20)	Ν	4	11	5	4	13	5	2	2	1	6
	%	20	55	25	20	65	25	10	10	5	30

Table 3.2: Characteristics of the 2010/11 school population, drawn sample, and achieved sample

3.3.3.2 Students

From the 20 participating schools, 4039 completed student questionnaires were returned in the first wave of data collection. About one-quarter of these students attended schools in Dublin (23%) or in the rest of Leinster (25%). Just over one-third of students were in Munster (37%), with about one-sixth (15%) in Ulster. Just under half of the Wave 1 participants (48%) attended large schools.

First, Tables 3.3, 3.4, and 3.5 present the characteristics of the achieved samples in the first, second and third waves of data collection, respectively. As shown, participant characteristics were broadly stable across the three waves. A lower proportion of participants from DEIS schools was recorded amongst the Transition Year students than in other grade levels, reflecting lower rates of provision of the programme in DEIS schools and lower uptake rates among students in DEIS schools (Clerkin, 2013; Jeffers, 2002). Roughly one-third of students in each wave attended schools where participation in Transition Year was compulsory.

		Student				School		
					Comm.		Irish-	Compulsory
		Male*	Sec.	Voc.	/Comp.	DEIS	medium	ТҮ
Third Year	Ν	834	1067	285	211	240	122	478
(N = 1563)	%	53	68	18	13	15	8	31
ТҮ	N	599	836	187	108	125	93	494
(N= 1131)	%	53	74	17	10	11	8	44
Fifth Year	N	715	965	179	201	205	108	440
(N = 1345)	%	53	72	13	15	15	8	33
Total	N	2148	2868	651	520	570	323	1412
(N = 4039)	%	53	71	16	13	14	8	35

Table 3.3: Participants in Wave 1 (2011), by grade level, with selected student and school characteristics

*Gender is missing for 3 students in Third Year. Female column omitted for reasons of space.

		Student		School							
		Male*	Sec.	Voc.	Comm. /Comp.	DEIS	Irish- medium	Compulsory TY			
ТҮ	N	609	882	143	141	99	101	439			
(N= 1166)	%	53	76	12	12	8	9	38			
Fifth Year	N	713	919	253	192	233	115	431			
(N = 1364)	%	52	67	19	14	17	8	32			
Total	N	1322	1801	396	333	332	216	870			
(N = 2530)	%	53	71	16	13	13	9	34			

*Gender is missing for 10 students in Transition Year and 8 students in Fifth Year. Female column omitted for reasons of space.

		Student	School								
		Male*	Sec.	Comm. Irish- Voc. /Comp. DEIS mediu				Compulsory TY			
Fifth Year	Ν	683	887	179	235	180	80	443			
(N=1301)	%	53	68	14	18	14	6	33			
Sixth Year	N	663	821	188	179	208	85	426			
(N =1188)	%	56	69	16	15	18	7	36			
Total	N	1346	1708	367	414	388	165	869			
(N =2489)	%	54	69	15	17	16	7	35			

Table 3.5: Participants in Wave 3 (2013), by grade level, with selected student and school characteristics

*Gender is missing for 7 students in Fifth Year and 9 students in Sixth Year. Female column omitted for reasons of space.

Next, Table 3.6 compares the achieved sample of Wave 1 student respondents with the population from which they were drawn – all Third Year, Transition Year, and Fifth Year students attending a school with TY students in 2008/09 (the school year used to construct the sampling frame). Participants from Wave 1 are the focus here because they represent the baseline reference point for subsequent waves, and as such are the foundation for the study. Male students were seen to be slightly over-represented in the achieved sample. They were also slightly more likely to attend a secondary school and less likely to attend a community/comprehensive school. However, in both cases the differences were small. Broadly speaking, in terms of the characteristics of the schools they attend, the study participants appear to reflect the population from which they were drawn.

		Student				School		
		Male	Sec.	Voc.	Compulsory TY*			
Population	Ν	51010	69700	17848	17259	12924	6594	-
(N = 104807)	%	49	67	17	16	12	6	_
Study participants	Ν	2148	2868	651	520	570	323	1412
(N = 4039)	%	53	71	16	13	14	8	35

 Table 3.6: Characteristics of 2008/09 student population in schools where TY was available, and achieved sample for Wave 1 participants

*Population-level data on compulsory/optional Transition Year programmes are not available.

Table 3.7 takes a closer look at some of the information contained within Table 3.6 by considering only the students who were in Third Year for the first wave of data collection in 2011. These students are of particular interest, as they are the students for whom complete longitudinal data (pre-, during, and post-Transition Year) are possible within the three planned waves of data collection. As shown here, the characteristics of these Third Year students relative to their peers nationally were very similar to those described for the complete sample in Table 3.6. As such, the participating Third Years can be considered a accurate reflection of the broader Third Year population.

 Table 3.7: Characteristics of the 2008/09 Third Year population in schools where TY was available, and achieved sample for Wave 1 (2011)

		Student				School			
		Male	Sec.	Voc.	Comm. /Comp.	Irish- medium	Compulsory TY		
Population	Ν	22876	29682	8658	8003	5772	2776	-	
(N = 46343)	%	49	64	19	17	12	6	-	
Study participants	Ν	834	1067	285	211	240	122	478	
(N = 1563)	%	53	68	18	13	15	8	31	

3.3.3.3 Effective sample size

Traditional inferential statistics (e.g., analyses of variance or linear regressions) depend on the assumption that all observations are randomly-sampled and completely independent of each other. This assumption is not true in cases where data are known to be clustered within a group, as is the case when multiple students take part within one school, because members of a group are usually more like each other than would be expected in a truly random sample (Dorman, 2008; Jones, 1993). For this reason, each observation provides less unique information than would be expected of a simple random sample (because some information

is shared among members of a cluster) so that the *effective sample size* is smaller than the actual sample size. The effective sample size is equivalent to the number of participants in a simple random sample that would provide the same level of unique information.

Here, using a guideline value of 0.025 for the intraclass correlation (ICC),²² the effective sample size achieved with these participating Third Year students was calculated as being equivalent to 534²³ students from a simple random sample of the population. This effective sample is considerably larger than the 400 students used as a target figure for producing precise statistical estimates in large surveys of education such as the Irish National Assessments (Eivers, Clerkin, Millar & Close, 2010) and the Trends in International Mathematics and Science Study (TIMSS; Foy & Joncas, 1999).²⁴

The large effective sample achieved here ensures that small standard errors for estimated measurements can be expected, thereby yielding relatively accurate populationlevel estimates for the relevant measures. Analyses in subsequent chapters use specialised software (MPlus) that takes appropriate account of the clustered nature of the data. Without correction for clustering, standard errors would be under-estimated, increasing the risk of reporting a false positive result. Therefore, correcting for clustering by inflating the standard errors is a more conservative approach and a more appropriate way to analyse data of this type.

3.3.3.4 Overall response rates (Wave 1 to Wave 3)

Overall response rates to the study, across all three waves, are presented below (Table 3.8). Teachers in the participating schools were not asked to provide attendance records for their classes on the day that the questionnaires were administered, so it is not known how many students were absent or out of class when questionnaires were administered. As a consequence, it is not possible to ascertain accurately how many students could have taken

(1563 / 1 + (.025)*(78.15 -1) = 534.

²² The intraclass correlation is a measure of how similar to each other students within a school are on a particular measure – in other words, it describes how strong the clustering effect is. The higher the ICC, the stronger is the clustering effect, representing greater between-school differences. The rho statistic, describing the ICC, is calculated as (within-school variance/within-school variance + between-school variance) for each measure. In this case, it was calculated separately for each psychosocial scale, with 0.025 selected as a representative overall estimate of the range of ICCs calculated. An ICC of this magnitude indicates reasonably low variance between schools on these measures, suggesting greater variance between students within schools. ²³ Effective sample size = (N / 1+ (ICC)*(average students per school - 1):

²⁴ Quoting Eivers et al. (2010, p. 34): "The effective sample size is important because it is directly associated with the accuracy of the survey estimates. An effective sample of 400 pupils will result in 95% confidence intervals of \pm 4.9% for a percentage and \pm 10% of the sample standard deviation for the reported mean."

part on a given day (i.e., who chose to participate or not participate). However, using school enrolment data provided by the Department of Education and Skills for each school for each of the three years in question, it is possible to compare the *achieved student sample* (the number of returned questionnaires) with the *total overall enrolment* at each grade level.

It is important to note that, if all enrolled students had been present when questionnaires were administered, the participation rates shown below would correspond exactly with the *actual* participation rate. However, it can be safely assumed that not all enrolled students were present during administration. For example, among a comparable cohort, 12.5% of the 15-year-old students selected to participate in PISA 2012 were recorded as being absent on the day of testing (Perkins et al., 2013). Students may also have been present in school but out of class while the survey administration was ongoing due to extra-curricular, personal, or other school-related activities. The percentages presented below can therefore be regarded as highly conservative – they almost certainly underestimate the true response rate.

Nonetheless, within these conservative parameters, the calculated participation rates were high (Table 3.8). Assuming no absenteeism, 77% of all enrolled students returned questionnaires at Wave 1, and 74% of the total student enrolment at Wave 2. In Wave 3, 69% of all enrolled students provided responses. If a realistic absenteeism rate of 12.5% (as per Perkins et al., 2013) is assumed to apply to the total enrolment on the day of administration, the achieved response rates are estimated at approximately 88% (Wave 1), 85% (Wave 2) and 78% (Wave 3) of students in attendance on the day.

These participation rates are favourable compared with those achieved with similar cohorts of second-level students in other Irish studies. For example, student participation rates ranging from 45% (Dooley & Fitzgerald, 2012) to 69% (Freeney & O'Connell, 2012) to 84% (Perkins et al., 2013) have been reported in recent large-scale surveys.

Considered as a whole, the high participation rates in each wave – together with the broadly representative nature of the sample – suggest that the information acquired over the course of the study should provide a good reflection of the national student body.

					-		•	-		-
	W	Wave 1 (2011)			Wave 2 (2012)			ave 3 (2013)		Total number of
Grade	Total enrolment	Q'aires returned	%	Total enrolment	Q'aires returned	%	Total enrolment	Q'aires returned	%	participants at each grade level
Third Year	1969	1563	79							1563
ТҮ	1448	1131	78	1578	1166	74				2297
Fifth Year	1844	1345	73	1820	1364	75	1909	1301	68	4010
Sixth Year							1718	1188	69	1188
OVERALL	5261	4039	77	3398	2530	74	3627	2489	69	9058
(assuming 12.5% absenteeism)	(4603)		(88)	(2973)		(85)	(3174)		(78)	

Table 3.8: Participation rates for Waves 1-3 as a percentage of total student enrolment (and assuming 12.5% absenteeism)

Enrolment figures come from Department of Education and Skills records for participating schools in the relevant years.

3.4 Matching longitudinal data

As the longitudinal element is one of the key features of this study, the capacity to match students' responses across waves was essential. This was achieved by means of a self-generated identification code (SGIC). Briefly, an SGIC was created for *each* participating student in *each* wave (2011, 2012, and 2013) by combining their school ID code with key identifying information provided by students for this purpose: date of birth, number of older brothers, initial of first name, and gender.²⁵ Unique SGICs from the first wave (2011) that also appeared in the second (2012) or third (2013) waves were matched to each other and considered as multiple participations by the same individual. More detail on the history and construction of SGICs, and their implementation in this study, is provided in Appendix F.

Figure 3.3 shows the final participation status of students classified according to their participation in one, two, or all three waves of the survey. The large circle at the top left of the diagram ("Wave 1 (2011)") contains all students who participated in the first wave of the survey. The large circle at the top right contains all students who participated in the second wave in 2012. The large circle at the bottom contains all participants in the final wave, in 2013. The total number of students who took part in each wave are given in the rectangle accompanying (touching) each large circle. The number of students that took part in only one wave is given in the largest portion of each circle, while the number of students who took part in any two, or all three, waves are shown in the intersections of the respective circles. Finally, the total number of students who took part at least once (in any wave) is shown in the separated rectangle in the bottom right of Figure 3.3.

As shown, a comparatively large number of students (1996 students) are categorised as taking part only once, in Wave 1. This is largely attributable to the participation of Fifth Year students in 2011 who were not invited to participate while in Sixth Year in 2012 (1341 students). Aside from this group, the largest group of students were the 1153 who participated and could be matched in all three waves of the study (underlined in the central intersection). Smaller numbers of students, ranging from 372-574, took part in any two of the three waves, or only in Wave 2 or Wave 3.

²⁵ School year, or grade level, was also used as part of a corresponding within-wave SGIC in order to assist in differentiating between students in different year groups in the same school, and as a check between waves.

In total, 5472 individual students returned questionnaires in at least one wave of the study, providing 9058 student-level records (each representing one participation per wave) across all three waves.

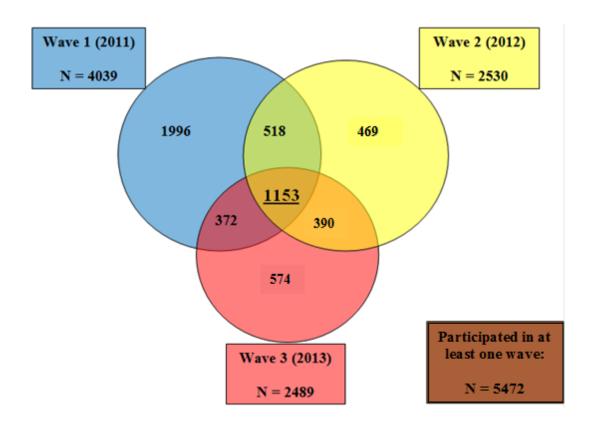


Figure 3.3: Extent of respondent overlap across waves (Ns participating in one or more waves)

Table 3.9 breaks this down further by showing the various combinations of cohort movement through one, two, or three waves of data collection. There were three groups of students of most interest. First, the students who were in Third Year when the study began, and also returned data from their participation in Transition Year and afterwards in Fifth Year. Second, the students who began the study in Transition Year and provided two further waves of information into Fifth and Sixth Year. Third, the students who were in Third Year when the study began and opted to skip Transition Year to move directly into Fifth Year and Sixth Year. Ninety-three students in this category provided three waves of data, while another 308 students who skipped Transition Year provided information in Third Year and either Fifth or Sixth Year.

	One wave only	Two waves	Three waves	Total
Third -> TY -> Fifth			525	525
Third -> Fifth -> Sixth			93	93
TY -> Fifth -> Sixth			528	528
Third -> TY		251		251
Third -> Fifth		269		269
Third -> Sixth		39		39
TY -> Fifth		381		381
TY -> Sixth		120		120
Fifth -> Sixth		209		209
Third only	383			383
TY only	491			491
Fifth only	1975			1975
Sixth only	190			190
Repeated Fifth/Sixth*		11	7	18
Total	3039	1280	1153	5472

Table 3.9: Cohort movement over three waves

*Includes several combinations of wave/grade.

Following Yurek, Vasey, and Haven's (2008) admonition that "results are biased if an impossible match is treated as a potential match... in such a case, match rates are underreported", 66 'unmatchable' students were identified among the Wave 1 participants. These 'unmatchable' students were defined as any student in Third Year or Transition Year in Wave 1 for whom one or more components of the SGIC was missing. Any remaining Third Year or TY student in Wave 1 – those with complete SGICs – could potentially have participated and been matched to their SGIC in the second (2012) and the third (2013) waves of data collection. The Wave 1 Fifth Year students were not considered, as the expectation was that they would be in Sixth Year in Wave 2 and therefore not eligible to participate again.

Of the students who could potentially have participated in all three waves, 1153 (44%) were found to have done so and to have provided exactly-matching SGICs on all three occasions (Table 3.10). In this study, only exact SGIC matches were accepted – the 'off one' procedure sometimes availed of to increase SGIC match rates (where one element of the SGIC, such as date of birth or initial, is allowed to be different in each wave while still counting as a 'match') was not used for secondary matching. Similar studies suggest that relatively few additional matches – e.g., about one-tenth of the final combined total, in Yurek

Design and implementation

et al. (2008) – are procured with the addition of off-one techniques. The use of the off-one procedure also adds an element of uncertainty into the data as it is impossible to know how accurate the additional matches (with missing elements) are. That is, some false positives are almost inevitable, particularly with a large dataset, as is the case here. For these reasons, it was decided to proceed on the basis that only exact matches would be considered in linking students' longitudinal participation in the study.

Tuble 3.10. Match fates for three wave longitudinal participation						
	2011 Third Year	2011 TY	Total			
Participants	1563	1131	2694			
'Unmatchable' SGICs	35	31	66			
Potential three-wave matches	1528	1100	2628			
Achieved three-wave matches	621	528	1153*			
Three-wave match rate	40%	47%	44%			

 Table 3.10: Match rates for three-wave longitudinal participation

*Total includes four students who were in Fifth year in 2011.

The 44% match rate achieved here compares favourably with other published uses of the SGIC technique over similar time periods and multiple waves of data collection.²⁶ For example, Lee, Westaby and Berg (2004) reported a 14% match rate with adolescents and young adults over three waves of their study, covering a period of 20 months. McAlister and Gordon (1986), working with high school students, matched almost 34% of participants over four waves spanning 18 months. Therefore, considering the relatively long (24-month) timespan of the current study, a 44% match rate encompassing each of the three waves is satisfactory. The possibility of attrition bias due to students not participating in every wave is considered in Section 3.6.

²⁶ Match rates tend to be higher when only two waves of data are considered, and when the period between waves is short (e.g., within one to four months) (Yurek et al., 2008).

3.5 Measures

A complete list of the measures included in the student questionnaire is provided in tabular format next (Section 3.5.1), grouped in categories by the nature of the targeted variable. Each table contains summary information on the composition of the measure (response format and number of items) and missingness rates across the three waves. Up to 5% missing data is generally considered to be non-problematic in terms of either loss of statistical power or biasing (Graham, 2009; Schlomer, Bauman & Card, 2010), although some researchers use more lenient guidelines ranging from 10% to 20% (Schlomer et al., 2010).

For scales that were derived from multiple items (e.g., the psychosocial measures), a measure of internal consistency is also calculated and presented. Internal consistency – given by Cronbach's alpha – is a measure of the extent to which a set of individual items making up a scale are assessing the same underlying construct. This has implications for the validity of a measure, as well as for statistical power for analysis (Henson, 2001). Alpha is expressed as a number between 0 and 1, with higher values denoting greater internal consistency. Generally, values in the region 0.7–0.9 are considered desirable for use in research. Values above 0.9 may indicate the presence of redundant items. The alpha coefficient is a property of a test with regard to the particular sample to which it is administered on any given occasion (Streiner, 2003; Tavakol & Dennick, 2011). In other words, a scale is not considered reliable or unreliable in itself, but is reliable or unreliable in terms of its use with a particular population under particular circumstances. As such, it is recommended that alpha is calculated and reported each time a scale is administered rather than relying exclusively on previously-published estimates.

3.5.1 Overall summary of measures

The tables on the following pages (Table 3.11 to Table 3.16) provide a brief summary of all variables measured for this study. The sections following these tables provide more detailed information on each measure. Preliminary analyses indicated that internal consistency and rates of missingness were broadly similar across year groups. Therefore, for clarity of presentation, the tables below report scale information using all student-level responses in cases where all students responded to the measure (Table 3.11 to Table 3.13).

For psychosocial measures, internal consistency was generally good, with alpha values near or within the guideline range (Table 3.11). Missingness rates for the psychosocial scales were, in almost all cases, well below 5%. Only one measure – the personal responsibility composite scale – exceeded 5% missing data, with 5.5% of respondents missing at least one

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of the fourteen constituent scale items. However, this was not considered problematic for two reasons. First, both of the individual subscales recorded acceptable levels of missingness in their own right (3% for work orientation, 3.7% for self-reliance). Second, missingness on the overall personal responsibility scale was reduced to 1.4% when any 13 of the 14 constituent items were considered sufficient to create the scale. This shows that the higher missingness rate was mostly due to single items being omitted from a long scale, suggesting that a high level of usable information remains available. No other scales presented potentially-problematic levels of missing data.

		teristics of psychoso	cial measures	
Scale	N items	Response format	Cronbach's alpha	Missingness (%)
School belonging	8	5-point scale	.78	3.7
Perceptions of teacher support (PISA)	5	5-point scale	.87	2.0
School legacy	4	5-point scale	.72	1.8
Experience of teacher support (RAPS)	4	5-point scale	.80	2.4
Engagement in learning	8	5-point scale	.79	2.5
Autonomous motivation	4	5-point scale	.69	2.2
Perceived competence	2	5-point scale	.67ª	1.3
Social self-efficacy	7	7-point scale	.77	2.8
(PMI – personal responsibility)	14	5-point scale	.77	5.5
PMI subscale – work orientation	6	5-point scale	.72	3.0
PMI subscale – self-reliance	8	5-point scale	.66	3.7
Subjective age	4	7-point scale	.69	1.8
Global life satisfaction	7	6-point scale	.86	4.5
Self life satisfaction	4	6-point scale	.69	3.3
School life satisfaction	4	6-point scale	.83	2.4

Table 3.11: Summary characteristics of psychosocial measures

N = 9058 overall. Specific Ns vary slightly by scale.

Note: Missingness rates, as shown, are calculated on the basis of any single constituent scale item missing from a student's response. If calculated on the basis of *at least 75%* of constituent scale items being available, missingness rates range from 0.1% to 1.4%.

^a Spearman-Brown coefficient presented rather than Cronbach's alpha for a two-item scale.

The remaining variables are summarised below: homework and study behaviours (Table 3.12), personal characteristics (Table 3.13), Third Year students' opinions on TY (Table 3.14), TY students' opinions on TY (Table 3.15), and Fifth and Sixth Year students' opinions on TY (Table 3.16). As shown, missingness rates were generally very low throughout. The variables with the highest missingness rates were those where students were given the opportunity to write a self-generated comment (Tables 3.14 to 3.16). Even

for these items, the opportunity to write an answer was generally taken up by approximately 90% of respondents.

Table 3.12: Summary of homework and study behaviours						
Variable label	N items	Response format	Missingness (%)			
Time spent on homework and revision (per week)	1	Continuous – self-reported in hours and minutes	13.7			
Homework and study activities	6	5 response options	1.6 – 1.9 (per item)			

N = 9058.

Table 5.15. Summary of personal and background characteristics					
Variable label	N items	Response format	Missingness (%)		
Plans for life after school	1	4 response options	1.1		
Know job desired when older	1	5 response options	0.5		
Educational aspirations	1	5 response options	3.6		
Parental education	2	7 response options	3.4 (maternal) 4.6 (paternal)		
Home language	1	3 response options	3.3		
Date of birth	1	Self-report	0.9		
Gender	1	2 response options	0.7		

Table 3.13: Summary of personal and background characteristics

N = 9058.

Table 3.14. Summary of third tear student opinions on transition tear						
Variable label	N items Response format Missingness					
Would like [X] in TY	1 Open-ended 10.4					
TY is a good experience	1	4.7				
Explain 'TY is a good experience'	1	Open-ended	11.1			
Plan to take part in TY	1	3 response options	3.3			
Explain 'plan to take part in TY'	1	Open-ended	12.4			

N = 1563.

Variable label	N items	Response format	Missingness (%)
TY is enjoyable	1	7 response options	1.4
TY is useful	1	7 response options	1.4
Happy with TY experience	1	7 response options	1.7
Explain 'TY is enjoyable/useful/ happy with TY'	1	Open-ended	10.4
Would recommend TY to 3 rd years	1	2 response options	2.6
Explain 'recommend TY to 3 rd years'	1	Open-ended	9.4

Table 3.15: Summary of Transition Year student opinions on Transition Year

N = 2297.

Table 3.16: Summary of Fifth Year & Sixth Year student opinions on Transition Year					
le label	N items	Response format	Missingness (%)		

Variable label	N items	Response format	Missingness (%)
Participated in TY (Y or N)	1	2 response options	1.8
(if Y) Happy with TY experience	1	7 response options	0.7
(if Y) Best things about TY	1	Open-ended	2.0
(if Y) Worst things about TY	1	Open-ended	4.5
(if Y) Personal outcomes perceived as attributable to TY participation	13	5 response options	0.4 – 2.2 (per item)
(if Y) Would recommend TY to 3 rd years	1 2 response options		2.2
(if Y) Explain 'recommend TY to 3 rd years'	1	Open-ended	5.0
(if N) Aspects of TY would have liked to take part in	1	Open-ended	9.5

N = 5198.

The following sections (Section 3.5.2 to Section 3.5.9) describe each of these measures in more detail. The psychosocial outcomes (student engagement, social self-efficacy, self-reliance and work orientation, subjective age, and life satisfaction) are presented first, in that sequence. Next, questions relating to students' homework and study behaviours are shown, followed by questions about personal characteristics and students' home background. Finally, the questions presented to each year group seeking their views on Transition Year are described. The full wording of all administered items can be found in Appendix A (in summary format) and Appendix B (as presented to students).

3.5.2 Student engagement

The broad concept of student engagement was represented by several scales drawn from two well-established sources: PISA (Programme for International Student Assessment, organised under the auspices of the OECD) and RAPS (Research Assessment Package for Schools, developed by the US-based Institute for Research and Reform in Education). PISA is intended for use with 15-year-old students internationally, including in Ireland, while versions of RAPS have been developed for American elementary and middle school students (IRRE, 1998) and for high-school students (W. Moore, Director of Research and Measurement at IRRE, personal communication, December 2009).

For this study, three scales drawing on items from PISA 2000 and PISA 2009 were used.²⁷ First, affective school belonging was measured by a five-point scale (*definitely disagree* to *definitely agree*), with students asked to respond to eight items following the stem 'My school is a place where...'. Sample items are *I feel included in things* and *I do not want to go* (reverse-scored). Second, student-teacher relations were assessed – following the same stem – by five items, including *Most of my teachers are interested in my well-being* and *If I need extra help*, *I will get it from my teachers*. In the current study, good internal consistency was observed for both school belonging (N = 8719, α = .78) and student-teacher relations (N = 8875, α = .87).

Third, students were asked to think about what they have learned in school, and then to agree or disagree with four items relating to their perception of how useful their school career will prove to be in adult life. Sample items include *School has done little to prepare me for adult life when I leave school*, and *School has taught me things which could be useful in a job*. Cronbach's alpha for this 'school legacy' scale was .72 (N = 8893).

Four short scales assessing aspects of student engagement and self-regulated learning were also included from the Research Assessment Package for Schools (IRRE, 1998; W. Moore, personal communication, December 2009). The selected scales address students' experience of teacher support, cognitive engagement in learning, autonomous motivation, and perceived competence. Each scale was presented in a five-point format ($1 = Not \ at \ all \ true, 5 = Very \ true$).

²⁷ The international version of the PISA 2000 student questionnaire can be downloaded from <u>http://pisa2000.acer.edu.au/downloads.php/</u>. The Irish national version of the PISA 2009 questionnaire is available from <u>www.erc.ie/documents/p09student_questionnaire.pdf</u>. (URLs verified March 24, 2016).

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The experience of teacher support scale assesses students' perceptions of teachers' fairness and likeability. The full scale contains eight items, of which three are identified as 'priority' items by the IRRE for their strong explanatory power. A sample item is *My teachers are fair with me*. Internal consistency for the three-item priority scale has been reported at .73. This scale received some adjustments following the pilot study for the current study. Following comments from students on the 'strange wording', one priority item was amended from *My teachers like to be with me* to *My teachers like talking to me*, which was felt to make more sense to students while maintaining the underlying concept. An additional related item (*My teachers treat me with respect*) was written and included with the scale. In this study, the adjusted four-item scale (three priority items plus the additional item) showed good internal consistency of $\alpha = .80$ (N = 8837).

The engagement in learning scale was intended to give a measure of students' effortful engagement in school and their understanding of the purpose of their schoolwork. It comprises eight items (sample items: *I pay attention in class* and *A lot of the time I am bored in class*). The IRRE report an internal consistency of .75 for the eight-item scale. Over the three waves of this study, good internal consistency (N = 8334, α = .79) was observed.

The autonomous motivation scale assesses the reasons why students engage with their schoolwork – broadly speaking, whether they are primarily intrinsically or extrinsically motivated. It is a four-item scale. Sample items are: *I do my schoolwork because I really want to understand the subjects we are studying* and *I do my schoolwork because I would get in trouble if I didn't.* As a more recently-developed scale, full psychometric information is not yet available from the IRRE. Cronbach's alpha in the current research was .69 (N = 8860).

Finally, the perceived competence (or perceived efficacy) scale assesses students' perceptions of their ability to learn what is needed at school. It comprises two items (sample: *I am capable of learning the material we are being taught at school*) (N = 8944; Spearman-Brown coefficient²⁸ = .67).

3.5.3 Social self-efficacy

The social self-efficacy subscale of the Self-Efficacy Questionnaire for Children (SEQ-C; Muris, 2001) was used in this study. The SEQ-C was developed for adolescents as an

²⁸ The Spearman-Brown coefficient is recommended in preference to Cronbach's alpha or other measures of internal consistency when scales consist of only two items (Eisinga, te Grotenhuis, & Pelzer, 2013).

alternative to self-efficacy scales that are designed to be used with adults (Muris, 2001), and includes social, academic, and emotional self-efficacy subscales. It has been used in Northern Ireland for research on adolescent alcohol use (McKay et al., 2011).

The social self-efficacy scale comprises seven items (samples include *How well can you* have a chat with an unfamiliar person? and *How well can you express your opinions when other classmates* disagree with you?) designed to assess respondents' self-perceived ability to manage relationships with their peers. Participants respond to each item on a seven-point scale (1 = Not at all, 7 = Very well), with higher scores indicative of a greater sense of social self-efficacy. Muris (2001) reports good internal consistency for the scale ($\alpha = .85$) when administered to Dutch adolescents, while Suldo and Shaffer (2007) report Cronbach's alphas of .73-.74 with American students. Here, internal consistency for the scale was good (N = 8808, $\alpha = .77$).

3.5.4 Self-reliance and work orientation

Two subscales of the Psychosocial Maturity Inventory (PMI; Form D; Greenberger & Bond, 1984) were administered: work orientation and self-reliance. These subscales were chosen for their conceptual relevance to the aims of the Transition Year programme, associations with other indicators of maturity, and for their use in related previous research (e.g., Cauffman & Steinberg, 2000; Galambos & Tilton-Weaver, 2000; Greenberger et al., 1975; Josselson, Greenberger & McConochie, 1975a, 1975b). Taken together, they can also provide a partial measure of personal responsibility.

Each subscale of the PMI contains ten items. Following the pilot study in October 2010, a number of items were identified that students reported finding difficult to relate to (e.g., because the wording was too stylised) and thus did not appear to form a coherent scale with the remaining items as expected. Due to these concerns, and space constraints, these items were removed from the questionnaire for the main study. Fourteen items were prioritised for the final reduced version of the subscales – six for work orientation, and eight for self-reliance. Sample items include *Someone often has to tell me what to do* (self-reliance), and *I often forget work I'm supposed to be doing* (work orientation).

Items were scored on a five-point scale (1 = Strongly disagree to 5 = Strongly agree) and subsequently recoded so that higher scores indicated greater work orientation or self-reliance. Previous studies have found internal consistency values ranging from .63-.76 for self-reliance and .68-.78 for work orientation (Galambos, Barker & Tilton-Weaver, 2003; Galambos & Tilton-Weaver, 2000; Steinberg et al., 1989), and .87 for the combined personal responsibility scale (Cauffman & Steinberg, 2000). In the current study, internal consistencies for the reduced subscales were $\alpha = .66$ (self-reliance; N = 8721) and $\alpha = .72$ (work orientation; N = 8787). Cronbach's alpha for the combined personal responsibility scale (representing a measure of 'maturity' based on the work orientation and self-reliance items taken together) was $\alpha = .77$ (N = 8556), indicating good internal consistency.

3.5.5 Subjective age

Four items measured how old participants perceived themselves to be relative to their chronological age and their peers: *Compared to most people my age, most of the time I feel* __; *Compared to most people my age, most of the time I look* __; *Males my age act towards me as if I am* __; and *Females my age act towards me as if I am* __. Each item was rated on a seven-point scale (1 = *a lot younger than my age,* 4 = the age I am, 7 = a lot older than my age). Therefore, higher scores indicate an older subjective age.

These items have been used frequently in research with North American adolescents on various aspects of psychological and social development (e.g., Galambos et al., 2009; Galambos, Barker & Tilton-Weaver, 2003; Galambos, Darrah & Magill-Evans, 2007; Turner et al., 1999), with reported alpha values greater than .80 in some cases (Galambos, Barker & Tilton-Weaver, 2003; Galambos, MacDonald, Naphtali, Cohen & de Frias, 2005). Internal consistency in this research was acceptable, at $\alpha = .69$ (N = 8895).

3.5.6 Life satisfaction and school satisfaction

Life satisfaction was measured using two instruments: the Multidimensional Students' Life Satisfaction Scale (MSLSS; Huebner, 2001; Huebner & Gilman, 2002) and the Students' Life Satisfaction Scale (SLSS; Huebner & Dew, 1996). Both the SLSS and MSLSS items were administered on a six-point response scale (*definitely disagree* to *definitely agree*). The SLSS is made up of seven items designed to assess global life satisfaction – independent of specific domains – among children and adolescents (sample item: *My life is going well*). In contrast, the MSLSS comprises five domain-specific subscales (pertaining to self, school, family, friends, and the living environment) in order to provide a more nuanced view of adolescents' life satisfaction. Huebner (2001) suggests that these domains may then be summed to provide a measure of general (overall) life satisfaction, but a more recent study (Sawatzky, Ratner, Johnson, Kopec & Zumbo, 2009) cautions against using the MSLSS in this way.²⁹ Sawatzky

²⁹ See Bandalos (2008) and Little et al. (2002) for further discussion on the appropriateness of parcelling items when measuring multidimensional constructs.

et al. (2009; see also Barnette, 2000) also advise against the inclusion of the ten negativelyworded items from the original forty-item MSLSS when using the instrument in research.³⁰

For this study, the self and school subscales of the MSLSS were administered in the abridged format (four positively-worded items for each subscale) recommended by Sawatzky et al. (2009). Sample items include *There are lots of things I can do well* (self) and *I look forward to going to school* (school). The data collected here show good internal consistency for the global life satisfaction (N = 8647, α = .86) and school satisfaction (N = 8844, α = .83) scales. The internal consistency of the self life satisfaction scale was lower (N = 8757, α = .69), but acceptable.

3.5.7 Homework and study behaviours

In addition to the psychosocial indicators described above, which were developed and used in previous research, a number of additional questions were constructed specifically for this study. The questions related to students' homework and study behaviours, their plans for life after school, and aspects of their home background (Tables 3.12 and 3.13). These details were requested in order to establish particular points of information to facilitate interpretation and explanation of the psychosocial data. With regard to study behaviours, students were asked to describe:

- Their homework and study habits. Students were asked to think of their homework over the last few weeks and to say how frequently, on a five-point scale (*Rarely/never* to *Every day*), they engaged in a number of study or revision behaviours – for example, practicing exam questions, thinking of different ways to solve a problem, or not doing the homework given by teachers. This question explored patterns of studying behaviour across grade levels and differences between students who do and do not participate in TY. The TY Guidelines (Dept. of Education, 1993) are clear that participating students "should be better equipped and more disposed to study than their counterparts who did not have the benefit of this year" upon entering the Leaving Certificate programme.
- The amount of time spent on homework or revision at home in a typical week (in hours and minutes, self-generated). Information on the time typically spent on homework or

³⁰ Huebner and colleagues (Huebner, Zullig & Saha, 2012) have since published an abbreviated version of the MSLSS, using only the positively-worded items, in response to some of the criticisms of Sawatzky et al. (2009).

study provides a natural complement to the information just described on the relative frequency of various homework and study habits. Self-reported time spent on homework among second-level students is associated with higher achievement and more positive social-behavioural outcomes (Sammons et al., 2012a, 2012b), although these relationships are not always clear (Rogers, 2012, 2013; Smyth et al., 2011). Times spent on homework may be linked to students' self-regulation strategies, motivation, and ability to learn independently, as well as providing opportunities to further develop study skills and engage with the material under study. In Ireland, Smyth (2009) found that the time spent on study and homework outside school was a significant factor in Leaving Certificate performance, even after taking prior academic achievement, gender, and SES into account.

3.5.8 Personal characteristics

With regard to personal characteristics and the home background, students were asked about:

- Their plans for life after they leave school, and whether they knew what job they would like when they are older. Students were asked to choose from a range of options about their plans for life after school, such as whether they planned to take a year out after school, look for a full-time job, go to further training or education, or didn't yet know. They were also asked if they knew what job they would like when they are older. Students could respond to this question by saying that they were sure what job they wanted, that they thought so, that they had an idea about a job but were not sure, that they didn't know, or that they had not thought about future jobs at all. These questions were intended to address one element of the 'gap year' function of Transition Year by examining how students' future plans, and their certainty regarding these plans, are associated with participation and non-participation in the extra year.
- *Educational aspirations.* Students were asked about the highest level of educational qualification that they would like to complete. Smyth et al. (2004) reported that TY participants in their study tended to report higher educational aspirations than non-participants, highlighting the value of recording the relative aspirations of TY participants and non-participants particularly in association with the data collected in this study on homework and study behaviours. Future-oriented cognitions such as educational aspirations are strongly related to subsequent academic achievement

and attainment, both in Ireland and internationally (Beal & Crockett, 2010; Rothon, Arephin, Klineberg, Cattell & Stansfeld, 2011; Shiel, Cosgrove, Sofroniou & Kelly, 2001). Educational aspirations tend to be positively associated with higher parental qualifications and more positive attitudes towards school (Geckova et al., 2010).

- Parents' educational qualifications. This question was intended to serve as a simple 0 proxy indicator for the home socioeconomic background (SES). Smyth et al. (2004) report that students from more socioeconomically advantaged backgrounds are significantly more likely to take part in Transition Year, suggesting that some indicator of socioeconomic status was necessary in this study in order to adequately interpret the collected data. Including this measure allows a direct comparison of the home backgrounds of TY students in 1994 (when Smyth et al.'s data were More generally, data on parental education are collected) and in 2011-13. commonly gathered in educational studies due to their consistent association with student outcomes (Sirin, 2005). For example, parental education has been shown to be more important than parental occupation in explaining reading achievement among 15-year-old students in Ireland (Perkins, Cosgrove, Moran & Shiel, 2012), and parental educational qualifications have been associated with students' postprimary academic achievement, as well as social and behavioural outcomes, in UKbased longitudinal research (Sammons et al., 2012a, 2012b). As noted above, higher parental educational qualifications are also linked to higher educational aspirations among students (Geckova et al., 2010).
- The language spoken in the home most often (presented as a choice between English, Irish, or another language). The composition of Ireland's population has changed substantially over the last two decades but, as noted in Chapter 1, the existing literature on Transition Year says very little about students for whom English or Irish are not the languages of the home, or about 'non-native' students, and how their patterns of participation in the extra year may differ from those of 'native' students. For example, about 9% of the Irish population in 2002 were born outside the State (CSO, 2003, Table 29), with two-thirds of these born in Northern Ireland or Great Britain countries that are linguistically and culturally similar to Ireland. By 2011, the proportion of residents born outside the State had almost doubled to 17% (CSO, 2012, p. 30), but with two-thirds of these coming from countries other than Great Britain or Northern Ireland. This shift can also be seen in Ireland's

secondary schools, where the proportion of 'immigrant' students has shown the second-largest increase (from 2% to 8%) of all the countries that participated in PISA between 2000 and 2009, with significant differences in achievement between those who speak English or Irish at home and those who speak another language (Perkins et al., 2012). Therefore, asking participants about the language of the home provides some initial information to facilitate exploratory analyses with regard to patterns of TY uptake among students from immigrant backgrounds. Home language was chosen as the indicator as it was considered to be a less sensitive question to ask than students' place of birth, and also because the spoken language better represents cultural and linguistic differences, which are more educationally-relevant than place of birth.

Their age (date of birth) *and gender*. Students provided their date of birth and gender as components of their unique self-generated identification codes. These were used in examining uptake of Transition Year and associations with other variables. Information on gender and age are also critical to understanding the development of personal responsibility and subjective age through adolescence (see Chapter 2).

All of the measures described so far were administered to each year group in the same format. There are two primary reasons for administering the same measures at each grade. First, presenting students with the same items in the same format ensures that the cross-sectional data arising from students' responses across all year groups are comparable. Second, in order to acquire high-quality longitudinal data a key principle was followed: namely, "when measuring change, do not change the measure" (Beaton, Zwick, Yamamoto, Mislevy, Johnson & Rust, 1990, p. 165). That is, in order to capture changes in students' responses to the items over time and to examine differing patterns of development most accurately, the measure by which the variables are assessed should not be unnecessarily changed between data collection waves. In this case, students in Third Year in 2011 saw and responded to exactly the same items in 2012 and 2013, with the exception of some open-ended questions relating to their thoughts on the Transition Year programme in their school that were different for each year (before, during, or after their participation). These items are described next.

3.5.9 Opinions on the Transition Year programme (grade-specific)

A number of grade-specific items were constructed, for this study, in order to give students an opportunity to voice their opinions on the programme based on their experience before, during, and after Transition Year. These included several open-ended (constructedresponse) questions that gave students an opportunity to generate answers and describe their opinions in a manner that was not possible with the Likert-style items in the rest of the questionnaire. These self-generated responses provide a context within which to interpret the information provided by the quantitative psychosocial indicators. Participants' responses to these items are reported in Chapter 6.

Third Year students were asked to describe what they would like to do in an ideal Transition Year, and whether they thought taking part would be a good experience from what they had heard about TY. They were also asked whether they expected to take part in Transition Year the following year, and why (or why not).

Transition Year students were asked to rate, on a seven-point scale, whether their experience of the programme had been enjoyable (*Not very enjoyable* to *Very enjoyable*), whether they thought it had been useful (*Not very useful* to *Very useful*), and, overall, how satisfied they were with their participation (*Very unhappy* to *Very happy*). These seven-point scales were written for this study, with the intention of teasing out the strength of students' personal feelings towards their Transition Year experience, which qualitative research has suggested may vary widely. In addition, students were asked whether they would recommend the year to current Third Year students, and were prompted to explain each of these answers further. For Wave 2, in 2012, some additional questions were added for Transition Year students (who were Third Year students in 2011). These asked whether their TY experience had been what they expected and whether they thought that the school had given them enough information about what the year would be like (and if not, what else would have been helpful). They were also asked whether they felt more or less prepared to face the Leaving Certificate after their Transition Year, compared to how they imagine they would have felt if they had not taken the extra year.

For Fifth Year and (in Wave 3) Sixth Year students, two separate sets of questions were provided, with students directed to answer one set or the other in the case that they had or had not taken part in Transition Year. Students were first asked whether or not they had taken part in TY. Students who had not taken part in TY – those who entered Fifth Year directly after Third Year – were asked whether there were any particular aspects of the programme that they would have liked to take part in and, if so, to identify them. Those who had participated in TY were asked about their satisfaction with the programme, corresponding with the equivalent question provided to TY students, and were also asked to nominate or describe the best and worst aspects of the year. They were then asked to

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respond, on a five-point scale (*Not at all true* to *Very true*), to thirteen statements drawing on common perceptions of positive and negative outcomes. These were derived from previous qualitative research and written for this study. Following the stem 'Because I did Transition Year...', sample items include *I feel like I've wasted a year* and *I made a better choice of Leaving Cert. subjects.* Finally, students were asked whether they would recommend TY to Third Year students, and the reasons why or why not.

3.6 Bias analysis

Following the completion of the third wave of data collection, the complete dataset was screened for any potential problems (e.g., patterns of extremely skewed data or extreme outliers). No major issues were found. For brevity, the results of these checks are described more completely in Appendix G.

A final crucial step in preparation for longitudinal analysis was to examine the matched data for attrition bias. Sample attrition can be defined as nonresponse in a longitudinal context (Foster & Bickman, 1996), meaning the nonresponse in subsequent waves of participants who had taken part in at least one earlier wave of a longitudinal study. Bias arising due to attrition – when there are systematic differences between those who continue to participate and those who do not – is common in longitudinal research, and represents one of the most serious threats to the validity of a longitudinal study. Broadly speaking, the greater the differences between the longitudinal and attrition samples, the less generalisable the results of the study can be to the general population of interest (Miller & Holliest, 2007). By comparing the longitudinal and attrition samples in this study on demographic and other relevant characteristics, we can judge the extent to which those who actively participated in all three years represent the characteristics of those who dropped out or did not have the chance to participate again after the first or second waves.

The key question in programme evaluations, such as the current study, is whether non-response affects the treatment group (in this case, TY participants) and the control group (non-participants) to different degrees – for example, if it were found that TY participants who stayed in the study for three waves exhibited different characteristics than participants who didn't, while non-participants exhibited no evidence of bias between their longitudinal and attrition samples (Foster & Bickman, 1996). In such a case, it would become difficult to evaluate the impact of student participants is no longer completely valid. On the other hand, if attrition over multiple waves of data collection affected both treatment (participants) and control (non-participants) groups in the same way, evaluative comparisons on the impact of the programme could still be made.

In order to examine the extent of any attrition bias, a bias analysis was carried out on the data from the 1563 students who provided information while in Third Year in Wave 1. The analysis focuses on these students because they were the only group for whom true baseline data (pre-Transition Year) was available, which allows direct comparisons to be made between TY participants and non-participants without confounding effects of selection into, or pre-existing participation in, the Transition Year programme. They therefore represent the clearest test of the effectiveness of the programme. The two groups – TY participants and non-participants – were examined separately in accordance with the principle that the most serious threat posed by attrition bias is that it could affect the two groups differently (Foster & Bickman, 1996).

Two separate tests were carried out, as recommended by Miller and Wright (1995). The first test examined bias in the characteristics of the student sample itself. The second test looked for bias arising in the relationships between variables. Full results of the bias analysis are given in Appendix H. For both types of test – bias relating to participants' characteristics and bias relating to the covariance of outcomes – the results indicate that the three-wave longitudinal sample was not negatively affected by attrition bias. There is no evidence that the students who took part in all three waves from Third Year are different from those who did not take part in all waves. The final data can therefore be regarded as being representative of the original sample, and as the basis for a fair test of difference between TY participants and non-participants.

Following these procedures and checks, substantive analyses of the data were carried out. The results of these analyses are presented in the following chapters. The characteristics of TY students are described in Chapter 4, and patterns of change in psychosocial outcomes over time in Chapter 5. Variation in the Transition Year experience is examined in Chapter 6, before conclusions are drawn in Chapter 7. Chapters 1 to 3 have described the background and methodology underpinning this study. This chapter begins to make use of the data. To begin with, descriptive statistics are presented with basic information on participating students and on the main outcome measures. Following that, a set of profiles are built up in order to examine which characteristics differentiate students who take part in Transition Year from those who do not. This is done initially for all Third Year students, and then separately for only those students in schools where Transition Year participation is optional, so that any key differences can be identified.

4.1 Descriptive statistics

Tables 4.1 and 4.2 show basic descriptive information on background and psychosocial characteristics for all participants. Students are categorised here by grade level, pooled across all three waves of the study – for example, the Fifth Year column represents Fifth Year students from 2011, 2012, and 2013. As a corollary, individual students who participated in more than one wave of the study also appear in more than one column here. Students' matched longitudinal responses, and the issue of change in intraindividual characteristics over time, will be considered in Chapter 5.

As shown in Table 4.1, educational aspirations tended to be higher at higher grade levels. This may be partially a function of self-selection – students with lower aspirations or more weakly-held intentions to attain a Leaving Certificate may have participated in Third Year but left school by the later grades. The relatively higher age of Third Year and Transition Years students is due to the fact that the survey was administered approximately one month later in 2011 (the only Wave in which Third Years took part, and one of two for TY students) than in 2012 and 2013. Any students who participated in 2011 were therefore roughly one month older than the equivalent students in subsequent Waves.

		Third Year	ΤY	Fifth Year	Sixth Year
		(N = 1563)	(N = 2297)	(N = 4010)	(N = 1188)
Gender	% - Male	53.5	52.8	52.8	56.2
	% - Female	46.5	47.2	47.2	43.8
Age	Mean (SD)	15.45 (.46)	16.36 (.44)	17.17 (.55)	18.10 (.58)
	% - Junior Cert.	1.8	-	-	-
	% - Leaving Cert.	14.5	15.2	13.7	11.9
Educational	% - PLC/apprenticeship	3.5	2.7	3.6	5.2
aspirations	% - Cert./diploma	14.9	14.1	12.6	11.2
	% - Degree	58.2	62.5	65.3	69.3
	% - Don't know	7.0	5.5	4.8	2.8
	% - Did not complete primary	0.2	0.4	0.7	0.5
	% - Primary	2.8	1.9	2.7	3.3
Mothor's	% - Lower secondary	13.3	11.7	14.0	16.2
Mother's education	% - Upper secondary	27.1	27.1	27.6	26.6
	% - Cert./diploma	17.6	21.0	19.0	19.2
	% - Degree/postgrad.	26.8	27.8	27.5	27.5
	% - Don't know	12.2	10.1	8.5	6.8
	% - Did not complete primary	1.4	0.6	1.6	1.3
	% - Primary	4.2	3.7	4.9	6.7
Father's	% - Lower secondary	19.0	19.8	22.4	23.1
education	% - Upper secondary	21.4	21.1	21.4	21.0
education	% - Cert./diploma	14.5	15.7	14.3	12.9
	% - Degree/postgrad.	25.8	26.4	25.2	26.2
	% - Don't know	13.6	12.7	10.2	8.7
Language	% - English	94.2	94.9	94.4	94.9
spoken at	% - Irish	0.7	0.6	0.6	1.0
home	% - Another language	5.1	4.4	5.0	4.1

Table 4.1: Descriptives on background characteristics, by grade level (pooled across waves)

Table 4.2 presents summary descriptive information on the main psychosocial outcome measures. One-way analyses of variance (ANOVAs) were carried out to examine the relationship between each variable and grade level. As these analyses are intended only for descriptive purposes, rather than for substantive hypothesis testing, no correction was made for multiple testing. The ANOVAs revealed statistically significant differences for the majority of outcomes – the exceptions being the non-significant differences for experience of teacher support (RAPS), social self-efficacy, work orientation, and self satisfaction.

The observed patterns of difference varied between variables. For example, Transition Year students reported lower cognitive engagement in learning (RAPS) than all other grade levels. Average scores tended to decline with grade level for students' perceived competence and global life satisfaction, while increasing for perceptions of teacher support (PISA). However, in all cases the effect sizes for the significant differences were negligible to very small. Eta-squared (η^2) values ranged from .001 for global life satisfaction (F _(3, 8988) = 4.13, p = .011, η^2 = .001) and school belonging (F _(3, 8961) = 3.71, p = .006, η^2 = .001), to .01 for school legacy (F _(3, 8929) = 32.96, p < .001, η^2 = .01). For comparison, Ferguson (2009)

suggests eta-squared values of .04 or greater as a minimum threshold for "practically significant" effect sizes for social science data.

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		Third Years	TYs	Fifth Years	Sixth Years
		(N = 1563)	(N = 2297)	(N = 4010)	(N = 1188)
Engagement in learning*	Mean (SD)	3.58 (.69)	3.47 (.67)	3.57 (.69)	3.55 (.72)
Experience, teacher support (RAPS)	Mean (SD)	3.81 (.83)	3.77 (.77)	3.80 (.77)	3.82 (.82)
Perceived competence*	Mean (SD)	4.29 (.76)	4.24 (.73)	4.14 (.78)	4.09 (.81)
Autonomous motivation*	Mean (SD)	2.70 (.86)	2.67 (.83)	2.76 (.88)	2.82 (.89)
School belonging*	Mean (SD)	3.66 (.64)	3.68 (.64)	3.62 (.69)	3.62 (.72)
Perceptions, teacher support (PISA)*	Mean (SD)	3.58 (.93)	3.64 (.86)	3.72 (.86)	3.80 (.86)
Social self-efficacy	Mean (SD)	5.08 (.92)	5.10 (.93)	5.08 (.97)	5.11 (.99)
Subjective age*	Mean (SD)	4.29 (.87)	4.32 (.82)	4.38 (.89)	4.34 (.88)
Self-reliance*	Mean (SD)	3.54 (.64)	3.60 (.61)	3.65 (.63)	3.64 (.65)
Work orientation	Mean (SD)	3.22 (.87)	3.23 (.81)	3.24 (.83)	3.27 (.83)
PMI personal responsibility*	Mean (SD)	3.40 (.63)	3.44 (.59)	3.48 (.61)	3.48 (.62)
Global life satisfaction*	Mean (SD)	4.35 (.96)	4.34 (.93)	4.28 (.95)	4.26 (.98)
Self satisfaction	Mean (SD)	4.62 (.86)	4.65 (.80)	4.60 (.81)	4.62 (.83)
School satisfaction*	Mean (SD)	3.91 (1.09)	3.98 (1.04)	3.88 (1.09)	3.89 (1.13)
School legacy*	Mean (SD)	3.92 (.83)	4.01 (.80)	3.85 (.87)	3.73 (.93)

Table 4.2: Descriptives on psychosocial characteristics, by grade level (pooled across waves)

*Significant differences between grade levels. No correction is made here for multiple comparisons.

Table 4.3 presents the correlation matrix for each of the main outcome variables. As above, data are pooled across waves of data collection; thus, "social self-efficacy" refers to the combined information on social self-efficacy from Wave 1, Wave 2, and Wave 3. Correlation coefficients are shown below the diagonal for each pair of variables, with statistically significant correlations flagged. Again, due to the purely descriptive nature of these correlations, no correction is made here for multiple comparisons.

Almost all pairs of variables were significantly correlated, with only two correlations failing to reach the conventional threshold for statistical significance. Students' subjective age was not significantly associated with their cognitive engagement in learning (r < .01, p > .05) or with their level of school satisfaction (r = .01, p > .05). Significant correlation coefficients ranged from the very weak – for example, subjective age with the RAPS (r = .03, p < .05) and PISA (r = .03, p < .001) measures of teacher support – to the strong (school satisfaction with engagement in learning; r = .58, p < .001). The RAPS experience of teacher support scale and the PISA perceptions of teacher support scale were highly correlated (r = .75, p < .001), confirming strong overlap in the underlying construct. As suggested by their high correlation, these measures also exhibited similar relationships with the other outcome variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
 Engagement in learning 	1														
2. Experience of teacher support (RAPS)	.42	1													
3. Perceived competence	.47	.39	1												
4. Autonomous motivation	.57	.31	.32	1											
5. School belonging	.38	.39	.34	.28	1										
6. Perceptions of teacher support (PISA)	.38	.75	.33	.29	.40	1									
7. Social self-efficacy	.14	.21	.25	.13	.49	.19	1								
8. Subjective age	<.01	.03*	.04	.05	.08	.03	.21	1							
9. Self-reliance	.27	.18	.27	.21	.32	.17	.31	.12	1						
10. Work orientation	.63	.26	.39	.48	.34	.25	.18	.06	.46	1					
 PMI personal responsibility 	.52	.26	.39	.41	.38	.25	.30	.11	.86	.85	1				
 Global life satisfaction 	.30	.31	.31	.21	.54	.31	.33	.05	.30	.29	.34	1			
13. Self satisfaction	.28	.30	.40	.24	.56	.30	.50	.16	.32	.32	.38	.60	1		
14. School satisfaction	.58	.49	.44	.51	.52	.49	.26	.01	.21	.45	.38	.39	.44	1	
15. School legacy	.39	.42	.32	.30	.44	.45	.20	03*	.17	.27	.25	.31	.29	.53	1

Table 4.3: Correlation coefficients between psychosocial outcome measures, all students, all waves

p < .001 marked in **bold**. p < .05 marked with *

No correction made for multiple comparisons.

4.2 Who takes Transition Year?

This section examines differences in the types of students who go on to participate in Transition Year compared to those who do not. Baseline reports (given at the end of Third Year) for key demographic and attitudinal variables are described for TY participants and non-participants, with significant differences highlighted. Baseline differences in psychosocial outcomes for both groups of students are also examined.

4.2.1 All students: Descriptive information

As might be expected, students who moved directly to Fifth Year after their Junior Certificate were significantly older than students who spent another year in TY before entering senior cycle (Table 4.4). However, this difference amounted to just two months, on average. Although male students were relatively more likely to take part in Transition Year than to skip the year (54% compared to 51%), this difference was not statistically significant.

Transition Year students tended to come from homes with higher levels of educational qualification (both maternal and paternal), and to express higher educational aspirations for themselves. This is also reflected in the substantial difference in reported time spent on homework and study in Third Year; students who went on to TY invested an average of more than 2.5 hours extra each week in Junior Certificate study. On the other hand, students whose primary home language was neither English nor Irish were significantly less likely to take part in TY. Just 3% of TY students, compared to 12% of non-participants, spoke another language at home.

With regard to students' intentions after leaving school, students who went on to take part in TY were significantly more likely to intend to go on to further education. In contrast, students who skipped TY were more likely to intend to find full-time work. This may be related to the fact that these students were also significantly more likely to say that they knew what job they would like to have when they were older, whereas more TY students reported having an idea of what sort of job they would like, but were not sure about it. Similar percentages of students in each group said that they planned to take a year out after school, or that they were unsure of their post-school intentions.

Unsurprisingly, the vast majority of Transition Year participants knew that they intended enrolling in the year by the end of Third Year (97%). Non-participants included a relatively higher proportion of students who were unsure at the end of Third Year whether

they would enrol in TY or not (2% of subsequent participants, compared to 12% of non-participants).

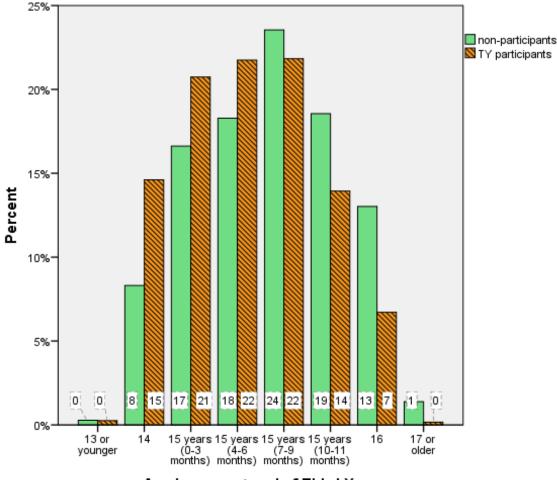
Most participants also reported having the impression, while in Third Year, that the Transition Year experience in their school would be a positive one (91%), with only 2% reporting negative impressions. In contrast, more than a quarter of students who moved directly to Fifth Year (27%) had negative expectations of TY while in Third Year, while almost a quarter of non-participants (23%) endorsed the belief that the programme could be a good experience in some schools, but not in their own.

		Transition Year participants (N = 1200)	Non-participants (N = 363)
Gender	% - Male	54.3	50.7
	% - Female	45.7	49.3
Age: years	Mean (SD)	15.4 (.43)	15.6 (.52)
Homework: hours per week	Mean (SD)	9.4 (6.45)	6.8 (6.57)
Educational	% - Junior Cert.	1.7	2.3
aspirations	% - Leaving Cert.	11.6	24.4
·	% - PLC / apprenticeship	2.5	6.6
	% - Cert. / diploma	15.4	13.5
	% - Degree	61.9	45.7
	% - Don't know	6.9	7.5
Mother's education	% - Did not complete primary	0.1	0.6
	% - Primary	1.9	6.2
	% - Lower secondary	11.8	18.3
	% - Upper secondary	27.4	26.0
	% - Cert/diploma	19.0	12.7
	% - Degree/ postgrad	29.6	17.2
	% - Don't know	10.2	18.9
Father's education	% - Did not complete primary	1.1	2.4
	% - Primary	3.2	7.9
	% - Lower secondary	18.6	20.7
	% - Upper secondary	20.9	23.1
	% - Cert/diploma	16.0	9.4
	% - Degree/ postgrad	28.6	15.8
	% - Don't know	11.6	20.7
Language	% - English	96.3	87.1
spoken at	% - Irish	0.5	1.2
home	% - Another language	3.2	11.8
Intentions after	% - take a year out	11.0	13.7
eaving school	% - look for a full-time job	4.4	12.0
	% - further training/	75.4	62.2
	education	75.4	02.2
	% - don't know	9.1	12.0
Know what job	% - Yes, I am sure	23.3	37.3
would like	% - Maybe, I think so	27.0	24.1
when older	% - Maybe, I have an idea but am not sure	31.1	23.0
	% - No, I don't know	14.5	11.8
	% - No, I haven't thought about it	4.1	3.9
From what you've heard,	% - Yes, it's good in my school	90.5	50.6
do you think TY	% - Maybe, in some		
is a good	schools but not mine	7.2	22.5
experience?	% - No, not a good		
	experience	2.3	26.9
Do you think	% - Yes	96.7	5.6
ou will take	% - No	1.2	81.9
part in TY next			
year?	% - Don't know	2.1	12.5

Table 4.4: Background characteristics of Third Year students (in all schools, N = 1563), by TY participation

Where significant differences (p < .05) exist, the higher value is marked in **bold**.

As noted above, students who took part in Transition Year tended to be younger than their classmates who skipped the extra year. Figure 4.1 presents the association between TY participation and age in greater detail. The percentages shown at the base of each bar are rounded to the nearest whole number³¹ and represent the percentage of students within each age group³² who participated or skipped TY. Because the majority of Third Year students (78%) were 15 at the time of the survey, 15-year-olds are shown divided into four groups at equal three-month intervals, calculated from the time between their date of birth and the administration of the survey. There were similar proportions of students in each of the four 15-year-old subgroups.



Age in years at end of Third Year

Figure 4.1: Transition Year participation by students' age at the end of Third Year

³¹ Where 0% is shown in Figure 1, a more accurate label would be '<1%'. In each case, a handful of students are represented in the respective categories.

³² Percentages within each category (participant and non-participant) may not sum to 100% due to rounding.

As shown, the age profiles of participants and non-participants mirror each other, with 15 years and 6 months apparent as a key transition point (Figure 4.1). At each age group up to 15.5 years old, Third Year students are relatively more likely to take part in Transition Year in the following academic year. Beyond 15.5 years, students are relatively less likely to take part in TY. As might be expected, the gap between participation and nonparticipation is wider at either extreme. For example, among 14-year-olds, participation in TY is twice as likely as non-participation while, on the other hand, students who are already 16 by the end of Third Year are twice as likely to move directly to the senior cycle.

Table 4.5 compares baseline scores for TY participants and non-participants on the selected indicators of social and personal development. For all measures of school engagement, relationships with teachers, psychosocial maturity, and school satisfaction, students who went on to participate in TY reported significantly higher scores in Third Year. They also reported higher global and self-related life satisfaction, greater perceived competence in their own abilities, and a greater sense that their educational experiences would prepare them for life after school. In contrast, students who moved directly from Third Year to Fifth Year reported a higher subjective age (i.e., they tended, on average, to feel older than their Third Year peers who went on to TY). Both groups of students reported similar levels of social self-efficacy and autonomous motivation for schoolwork.

, , ,					
	TY participants	Non-participants			
Engagement in learning	3.64 (.65)	3.36 (.78)			
Experience of teacher support (RAPS)	3.88 (.77)	3.58 (.98)			
Perceptions of teacher support (PISA)	3.64 (.88)	3.37 (1.05)			
School belonging	3.71 (.62)	3.50 (.69)			
Perceived competence	4.33 (.71)	4.15 (.87)			
Work orientation	3.26 (.85)	3.07 (.92)			
Personal responsibility	3.43 (.61)	3.31 (.69)			
Global life satisfaction	4.40 (.93)	4.17 (1.04)			
Self satisfaction	4.67 (.82)	4.45 (.97)			
School satisfaction	4.01 (1.02)	3.59 (1.23)			
School legacy	4.00 (.76)	3.63 (.96)			
Subjective age	4.25 (.83)	4.43 (.96)			
Social self-efficacy	5.10 (.91)	5.02 (.96)			
Self-reliance	3.55 (.62)	3.50 (.70)			
Autonomous motivation	2.71 (.87)	2.65 (.85)			

Table 4.5: Mean scores (SD) on psychosocial measures for Third Year students (in all schools, N = 1563), by subsequent TY participation or non-participation

Where significant differences (p < .05) exist, the higher value is marked in **bold**. Variables are ordered by the presence of significant differences.

4.2.2 All students: Odds ratios

The discussion so far has considered the relationship between each outcome measure and Transition Year participation in a descriptive fashion, with each variable considered in isolation. However, these variables are known to be inter-related (see Table 4.3) and significant differences between participants and non-participants may not remain when all variables are taken into account simultaneously.

In order to explore the predictors of Transition Year participation more fully, a series of logistic regression models were constructed. Logistic models allow us to consider a binary outcome variable (in this case, Transition Year participation versus non-participation) and to describe the relationship between this outcome and another variable in terms of an *odds ratio* (Bland & Altman, 2000). Odds ratios describe the probability of a student having membership of a particular group (TY participants), given a known value of a predictor variable, with implicit reference to another mutually-exclusive group (TY non-participants). The ratios may be interpreted as follows:

- An odds ratio of 1 represents absolute equality, or no difference in the likelihood of being in one group versus the other.
- An odds ratio <1 represents lower likelihood of TY participation. For example, an odds ratio of 0.5 denotes 'half as likely to take part in TY'.
- An odds ratio >1 represents greater likelihood of TY participation. For example, an odds ratio of 2.0 denotes 'twice as likely to take part in TY'.

For these models, all continuous measures were standardised to z-scores (mean = 0, standard deviation = 1). Standardising variables in this manner facilitates easier comparison of their relative influence on the outcome measure by placing each predictor on the same scale. The odds ratios associated with each z-score represent the change in likelihood associated with a one-standard deviation increase. For example, we know that the mean age of Third Year students was 15.45 years and that the standard deviation was .46 years, or just short of six months (Table 4.1). Therefore, the odds ratios associated with age in Table 4.6 represent the change in likelihood of participating in Transition Year associated with a sixmonth increase in student age.

Categorical measures were included in the models by creating *dummy variables* (assigning each category to its own, mutually-exclusive variable). Dummy variables are interpreted somewhat differently to continuous measures – each dummy is considered in

direct comparison to a *reference category*. For instance, females are used as the reference category for gender, so the odds ratios represent the change in likelihood of TY participation for students who are male. Similarly, upper secondary education is designated as the reference category for maternal education. Therefore, the odds ratios for other educational levels represent the relative likelihood of TY participation for students whose mothers have attained that particular level of education compared to students whose mothers attained an upper secondary-level qualification.

Each variable was first entered as the sole predictor in a logistic regression model with Transition Year participation as the outcome variable in order to examine the association between TY participation and each variable in isolation.³³ Following these initial analyses, three hierarchical models were run in succession. The first model (M1) contained only demographic information; the second (M2) retained demographics and also added attitudinal data. The final model (M3) built on M2 by adding psychosocial information, while controlling for demographic and attitudinal factors. The results of these models are shown in Table 4.6. Many variables showed significant associations with TY participation when considered on their own but, as shown in Model 3 (Table 4.6), only some variables remained as significant predictors of TY participation once all other (measured) factors are controlled for.

TY participation was found not to differ significantly by gender, but older students are seen to be less likely to take part in the programme. Students whose mothers did not finish secondary school were about half as likely to enrol in TY as students whose mothers had finished second-level education. Notably, students whose primary home language is not English or Irish were only one-fifth as likely to take part in TY as students from English/Irish-speaking homes, all else considered.

In terms of educational aspirations, students who aspired to a third-level degree were about 1.6 times as likely to take part in TY as students who intended finishing their full-time education following secondary school. Students who knew what their intended next step after school was (a year out, further education, or looking for work) were less likely to enrol in TY than students who were unsure of their next step, although these differences were not statistically significant. However, students who were unsure, or did not know, what type of

³³ These models were performed using MPlus version 6.11. The COMPLEX command was used to take account of the clustered nature of the data.

job they would like after school were significantly more likely (1.6-1.7 times) to participate than students who did know what job they would like. Taken together, these findings could be taken to support the interpretation, advanced in Chapter 1, of TY as being a sort of gap year which students can use to explore possibilities for adult life.

The amount of time spent on homework was seen in the previous section to be positively associated with TY participation – however, homework hours were not a significant predictor once students' psychosocial characteristics were taken into account. Many of the baseline psychosocial characteristics were only slightly positively or negatively associated with Transition Year participation (Model C). Three variables were found to significantly predict subsequent TY participation. Students with a high sense of autonomous motivation in Third Year were less likely to take part in TY, preferring instead to advance directly to the senior examination cycle. In contrast, students were more likely to enrol in TY if they had reported a strong engagement in learning in Third Year (1.6 times) or if they felt that their time in school to that point had helped to prepare them for later life (1.3 times). This indicates that students with more positive dispositions towards being in school are more likely to sign up for the extra year.

Variable (comparison)	Model 1	Model 2	Model 3
Male (<i>Ref: female</i>)	1.31	1.60	1.55
Age (zscore)	.70 ***	.73 ***	.70 ***
Maternal education (Ref: Upper secondary)			
Primary/Lower secondary	.15 ***	.52 ***	.56 ***
Third level	1.51	1.24	1.38
Home language (Ref: English/Irish)			
Another language	.26 ***	.26 **	.21 **
Hours homework per week (zscore)		1.34 *	1.22
Plans after school (Ref: Don't know)			
Year out		.77	.77
Full-time job		.64	.59
Further education		1.04	.91
Know what job would like (Ref: Yes)			
Maybe		1.93 ***	1.67 **
No		1.74 **	1.57 *
Educational aspirations (Ref: Leaving Cert)			
PLC/Certificate		1.17	1.27
Degree		1.51 *	1.56 *
Don't know		1.51	1.68
Engagement in learning (zscore)			1.57 ***
Experience of teacher support (RAPS) (zscore)			1.14
Perceived competence (zscore)			.83
Autonomous motivation (zscore)			.73 **
School belonging (zscore)			1.10
Perceptions of teacher support (PISA) (zscore)			.98
Social self-efficacy (zscore)			.92
Subjective age (zscore)			.92
PMI personal responsibility (zscore)			1.12
Global life satisfaction (zscore)			.94
Self satisfaction (zscore)			1.16
School satisfaction (zscore)			1.04
School legacy (zscore)			1.33 **

* p ≤.05 ** p ≤.01 *** p ≤.001

4.3 Who *chooses* to take Transition Year?

While the previous section considered all Third Year students who took part in Wave 1, this analysis is restricted to students in schools where Transition Year is offered on an optional basis. In other words, while Tables 4.4 and 4.5 (previous section) provide a profile of Transition Year participants and non-participants generally, Tables 4.8 and 4.9 (this section) describe students who more actively choose to participate in Transition Year and those who opt to reject Transition Year in favour of moving directly to the senior cycle.

4.3.1 Optional TY only: Descriptive information

Thirteen of the twenty participating schools provided optional TY programmes, providing 1085 Third Year students (69% of the total number of Third Years) in Wave 1. These schools tended to be mixed rather than single-sex, while the opposite pattern was dominant where TY was compulsory (Table 4.7). Optional TY programmes were spread across all school types – again, in marked contrast to schools with compulsory TY programmes, all of which were in the voluntary secondary sector. Although three of the four fee-paying schools in the study considered TY participation to be compulsory for their students, four non-fee-paying schools also provided compulsory Transition Years. No schools in receipt of extra supports under the SSP/DEIS programme made Transition Year a compulsory experience.

	DEIS status Gender		Туре			Fee-paying?				
		Non-						Comm./		No
	DEIS	DEIS	Mixed	Boys	Girls	Sec.	Voc.	Comp.	Fees	fees
Compulsory TY (N = 7)	0	7	2	3	2	7	0	0	3	4
Optional TY (N = 13)	4	9	9	2	2	6	5	2	1	12

Table 4.7: Characteristics of schools with optional or compulsory TY programmes

Table 4.8 describes selected demographic and attitudinal features of Third Year students who subsequently opted to enter or skip Transition Year. It can be compared with Table 4.4, which includes these students alongside their peers in schools where Transition Year participation is deemed compulsory.

As shown, the gender balance is somewhat different when only optional TY participation is considered. Whereas a majority of TY students are male across all schools, relatively higher female participation in Transition Year (52%) is evident in TY-optional schools. This discrepancy can be at least partially accounted for with the observation that single-sex boys schools may be more likely to insist on compulsory participation (Table 4.7).

The profile of participants and non-participants across the other background variables is otherwise generally similar to that described for the complete sample of Third Year students in Table 4.4 (previous section).

		Transition Year participants	Non-participants
Gender	% - Male	48.5	50.0
	% - Female	51.5	50.0
Age: years	Mean (SD)	15.4 (.39)	15.6 (.50)
Homework: hours per week	Mean (SD)	9.5 (6.61)	6.7 (6.53)
Educational	% - Junior Cert.	2.0	1.9
aspirations	% - Leaving Cert.	11.9	25.6
	% - PLC / apprenticeship	2.3	6.6
	% - Cert. / diploma	14.8	14.2
	% - Degree	62.8	44.8
	% - Don't know	6.2	6.9
Mother's	% - Did not complete	0.1	0.6
education	primary	0.1	0.6
	% - Primary	2.0	6.8
	% - Lower secondary	13.1	18.4
	% - Upper secondary	27.9	27.4
	% - Cert/diploma	18.8	12.9
	% - Degree/ postgrad	27.2	15.8
	% - Don't know	10.7	18.1
Father's education	% - Did not complete primary	1.2	2.6
cucation	% - Primary	4.3	8.6
	% - Lower secondary	21.3	20.9
	% - Upper secondary	22.2	24.5
	% - Cert/diploma	15.4	8.3
	% - Degree/ postgrad	23.3	15.2
	% - Don't know	12.3	19.9
Language	% - English	96.5	88.2
spoken at	% - Irish	0.5	1.0
home	% - Another language	3.0	10.9
Intentions after	% - take a year out	10.0	14.4
leaving school	% - look for a full-time job	4.6	11.7
C	% - further training/ education	75.5	62.9
	% - don't know	9.9	11.0
Know what job	% - Yes, I am sure	21.3	35.3
would like	% - Maybe, I think so	29.5	25.5
when older	% - Maybe, I have an idea		
	but am not sure	31.0	23.3
	% - No, I don't know	14.7	12.3
	% - No, I haven't thought	3.5	3.7
From what	about it % - Yes, it's good in my		
you've heard,	school	93.4	51.7
do you think TY	% - Maybe, in some		
is a good	schools but not mine	5.1	21.8
experience?	% - No, not a good		
experiencer	experience	1.5	26.5
Do you think	% - Yes	96.2	6.1
you will take	% - No	1.5	84.6
part in TY next		1.5	
year?	% - Don't know	2.3	9.3

Table 4.8: Background characteristics of Third Year students (in schools where TY is optional, N = 1085),by subsequent TY participation or non-participation

Where significant differences (p < .05) exist, the higher value is marked in **bold**.

Table 4.9 presents information on the psychosocial outcome measures. The overall pattern is identical to that reported for all students (including those in compulsory Transition Year programmes) in Table 4.5. Students who opt to skip TY tend to feel older than their classmates who choose to take the extra year. On the other hand, students who choose to take part in TY report more positive attitudes towards school across a range of indicators of engagement, as well as higher self-perceived maturity.

	TY participants	Non-participants
Engagement in learning	3.66 (.65)	3.37 (.78)
Experience of teacher support (RAPS)	3.86 (.79)	3.60 (.97)
Perceptions of teacher support (PISA)	3.62 (.89)	3.39 (1.05)
School belonging	3.71 (.61)	3.49 (.69)
Perceived competence	4.34 (.70)	4.16 (.89)
Work orientation	3.30 (.83)	3.09 (.92)
Personal responsibility	3.46 (.61)	3.33 (.69)
Global life satisfaction	4.41 (.90)	4.19 (1.04)
Self satisfaction	4.66 (.82)	4.46 (.95)
School satisfaction	4.02 (1.02)	3.60 (1.24)
School legacy	4.02 (.75)	3.70 (.92)
Subjective age	4.22 (.82)	4.40 (.97)
Social self-efficacy	5.08 (.92)	5.03 (.95)
Self-reliance	3.57 (.63)	3.52 (.70)
Autonomous motivation	2.73 (.87)	2.66 (.86)

Table 4.9: Mean scores (SD) on psychosocial measures for Third Year students (in schools where TY is optional, N = 1085), by subsequent TY participation or non-participation

Where significant differences (p < .05) exist, the higher value is marked in **bold**.

4.3.2 Optional TY only: Odds ratios

Table 4.10 converts the bivariate relationships just described into odds ratios, taking each relationship into account simultaneously. As with Table 4.6, above, with which Table 4.10 can be compared, a series of three logistic regression models are presented: Model 1 (demographic), Model 2 (demographic and attitudinal), and, finally, Model 3 (demographic, attitudinal and psychosocial characteristics).

Some differences between Tables 4.6 and 4.10 can be noted. First, one variable (school legacy) that was a significant predictor of participation across all schools does not reach statistical significance in TY-optional schools. However, the strength of the relationship (an odds ratio of 1.33 in all schools and 1.29 in TY-optional schools) is similar, suggesting that, substantively speaking, students' perceptions of the lasting impact of their school experience remains worth considering in any discussion of factors that may influence the students' intentions of enrolling in TY. All other factors that were found to be

significant in all schools were also significant when only schools with optional TY programmes are considered.

Students' plans after leaving school were not a statistically significant factor in this set of models, but a stronger relationship between these plans and TY participation was evident in TY-optional schools than in all schools. In general, students who had any intention for their next step after school were less likely to take part in TY in optional schools than students who didn't know. In the case of students who intended looking for a full-time job, they were only about half as likely to sign up for Transition Year, if given the option, than their peers who didn't know what they wanted to do after school.

Variable (comparison)	Model 1	Model 2	Model 3
Male (<i>Ref: female</i>)	1.11	1.35	1.25
Age (zscore)	.66 ***	.69 ***	.65 ***
Maternal education (Ref: Upper secondary)			
Primary/Lower secondary	.51 **	.63 *	.69 *
Third level	1.55 *	1.31	1.41
Home language (Ref: English/Irish)			
Another language	.30 **	.28 *	.22 *
Hours homework per week (zscore)		1.35 *	1.24
Plans after school (<i>Ref: Don't know</i>)			
Year out		.61	.61
Full-time job		.60	.48
Further education		.88	.78
Know what job would like (Ref: Yes)			
Maybe		1.70 **	1.39 *
No		1.57	1.55
Educational aspirations (Ref: Leaving Cert)			
PLC/Certificate		1.08	1.20
Degree		1.56 *	1.66 *
Don't know		1.33	1.52
Engagement in learning (RAPS) (zscore)			1.58 ***
Experience of teacher support (RAPS) (zscore)			1.07
Perceived competence (RAPS) (zscore)			.84
Autonomous motivation (RAPS) (zscore)			.76 *
School belonging (PISA) (zscore)			1.20
Perceptions of teacher support (PISA) (zscore)			.96
Social self-efficacy (zscore)			.86
Subjective age (zscore)			.93
PMI personal responsibility (zscore)			1.12
Global life satisfaction (zscore)			.90
Self satisfaction (zscore)			1.19
School satisfaction (zscore)			1.00
School legacy (zscore)			1.29

Table 4.10: Odds ratios predicting Transition Year participation from Third Year characteristics, in schools with optional TY only

* p ≤.05 ** p ≤.01 *** p ≤.001

4.4 Summary of key findings

Several features of the 'typical' Third Year student who goes on to take part in Transition Year can be identified. These features are broadly similar whether students attend a school with a compulsory TY programme or an optional one, with a few minor differences. Looking first at background characteristics, TY participants tend to be significantly younger than their non-participating peers who prefer to skip the extra year in school. On average, students are more likely to take part in TY if they are younger than 15.5 years old by the end of Third Year – participation rates decrease beyond that point, with 16-year-olds more than twice as likely to move directly to Fifth Year as to enrol in TY. TY participants tend to come from homes with higher levels of educational attainment. Students who speak a language other than English or Irish at home are more likely to skip TY than to take part.

Several attitudinal characteristics also reveal differences between participating and non-participating students. For example, students who go on to TY spend more time on homework and study in Third Year. In line with their higher average level of parental educational attainment, TY participants also report significantly higher educational aspirations and are more likely to intend going on to further education or training after finishing school. In contrast, non-participants are more likely to intend looking for employment straight after leaving school, and also tend to be more sure about what sort of job they want to look for. This finding provides some evidence that at least part of the appeal of Transition Year to participating students is its function as a gap year within secondary education, within which the time and freedom to explore future options can be exploited.

When all these variables are considered together, we see that older students, those whose parents have lower educational qualifications, those who speak another language (not English/Irish) at home, those who know what type of job they want after school, and those who intend finishing their education at Leaving Certificate level are more likely to skip Transition Year by moving directly to Fifth Year classes. These students are significantly less engaged in school and have a lesser sense of being prepared for adult life following their schooling (school legacy). However, they report a higher sense of autonomous motivation towards their schoolwork.

It is of interest to note that only about one-quarter of non-participating students unequivocally say that they think Transition Year is not a good experience. A substantial minority believe TY to be a good experience in some schools, but they don't think it is

Profile of TY participants

worthwhile in their own school. About half of non-participants believe TY to be a good experience in general, even if not for themselves.

This chapter has examined differences in students' characteristics up to the end of their shared junior cycle education. Next, Chapter 5 considers the issue of developmental change from this point onwards, and any differences in development that might be related to the experiences of Transition Year. The pre-existing differences in students' background characteristics and attitudes that are described here will be controlled for in these analyses in order to more fully isolate any association between the outcome measures and TY participation.

Chapter 5: Psychosocial development and Transition Year

This chapter sets out to answer the core question of the study: to what extent is participation in Transition Year associated with differences in students' social and personal development, as operationalised by the selected outcome measures?

The most appropriate technique with which to answer this question is latent growth curve modelling (Locascio & Atri, 2011, Moskowitz & Hershberger, 2002; Preacher, Wichman, MacCallum & Briggs, 2008), which is an extension of the structural equation modelling family. Latent growth modelling shifts attention away from the observed measures to the unobserved latent factors that gave rise to the observed data. The *observed measures* are the specific responses provided directly by students to the questionnaire items at each time point. The *latent factors* are estimated from the observed measures, and serve as proxies for the (unobserved) underlying psychological attribute that is really the object of interest in the research question (Borsboom, Mellenbergh & van Heerden, 2003). In a growth model, two latent factors are estimated – the *initial status* (the baseline level of the attribute in question) and the *slope* (subsequent direction and rate of developmental change from this baseline value over time). With these latent factors, the analyses aim to fulfil the definition offered by Browne and Cudeck (1992, p. 230) for all modelling techniques: that they be fit to the data "in an attempt to understand underlying processes that have been operating" in a clearly comprehensible fashion.

Latent growth modelling has several advantages over more conventional ANOVA or multiple regression techniques. In growth modelling, both latent factors are produced simultaneously by drawing on all available observed data. This produces a more complete, more parsimonious, and smoother representation of change over time than would be achieved by simply comparing Time 1 to Time 2 and Time 2 to Time 3 (Bollen & Curran, 2006; Curran & Hussong, 2002; Lane, Franklin and Curran, 2013; Preacher et al., 2008). In addition, while a repeated-measures ANOVA can be used to compare mean differences between groups over time, it treats individual differences within groups as error variance. By contrast, a key feature of latent growth curve modelling is that it treats these individual differences as a parameter of interest, alongside mean group-level differences, which allows direct estimation of the extent of intraindividual variation in the outcome measures (Duncan & Duncan, 2009; Voelkle, 2007). Each model therefore produces four key pieces of

information: estimates of the average initial status and the average rate of growth, and estimates of the variation in initial status and variation in the growth rate between individuals (Muthén & Khoo, 1998). Finally, latent growth modelling represents a more powerful method than analysis of variance for testing differences between groups in the rate of change over time (Fan, 2003), which is one of the main goals of this study.

The remainder of the chapter is divided into three main sections. Section 5.1 describes the extent to which students' responses varied by school, and the implications of this clustering for analysis. Section 5.2 provides a general introduction to latent growth curve modelling, including the model-building strategy used here and guidance on how to interpret the results. Finally, Section 5.3 presents the results of the latent growth curves, beginning with a general summary of the findings in relation to Transition Year participation and subsequently presenting the results for specific outcomes in more detail.

5.1 Variance between and within schools

The first step taken in the model-building exercise was to determine the extent of clustering amongst students' responses and attitudes within schools. It is well-established that, in general, people tend to resemble other members of their social groups more closely than the general population (Jones, 1993). This phenomenon is consistently observed in medical (Bland & Kerry, 1997; Eldridge, Ashby, Feder, Rudnicka & Ukoumunne, 2004) and educational settings (Dorman, 2008; Foy, 2004; Hedges & Rhoads, 2009), amongst others.

As noted in Chapter 3, this clustering effect is described using a measure known as the *intraclass correlation* (ICC). The ICC for any variable is the proportion of the total variance in the data that is accounted for by the similarity of group (cluster) members to each other. A higher ICC represents a greater degree of clustering – for example, a greater degree of similarity among students within schools. Previous studies have shown that intraclass correlations amongst school-going students tend to be a lot smaller for attitudinal and psychosocial variables (typically ranging between .01 and .05) than for measures of academic achievement, which are typically greater than .20 (Hutchison, 2009; Opdenakker & Van Damme, 2000; Reeve & Lee, 2014).

The ICC can also be used, in conjunction with the average cluster size, to calculate the *design effect.*³⁴ Therefore, the larger the average cluster size and/or the larger the ICC, the greater the design effect. A sometimes-cited rule of thumb is that the clustered nature of a data structure can be ignored – i.e., treated as a simple random sample – if the design effect is less than 2 (e.g., Peugh, 2010; cf. Muthén & Satorra, 1995). However, for both statistical (Lai & Kwok, 2015) and conceptual (Nezlek, 2008) reasons, it may be preferable to treat hierarchical data as hierarchical even when the design effect is small (<2). Most crucially, treating the sample as if it were random when it is known that any degree of clustering is present runs the risk of underestimating standard errors, and therefore inflates the risk of Type I errors (incorrect rejection of the null hypothesis).

Table 5.1 shows the intraclass correlations, design effect, and percentage of variance between and within schools for each outcome measure over the three waves. All figures were calculated using MPlus (version 6.11) (Muthén & Muthén, 2010).

³⁴ Design effect = 1 + ((average cluster size - 1)* intraclass correlation).

	Wave	Intraclass correlation	Design effect (>2?)	% variance within schools	% variance between schools
	W1	0.02	5.1	97.9	2.1
Engagement (RAPS)	W2	0.03	8.3	97.2	2.8
	W3	0.03	7.8	97.8	2.8
Relationships with	W1	0.04	10.8	95.9	4.1
teachers (RAPS)	W2	0.05	14.1	94.6	5.4
	W3	0.06	17.6	93.3	6.7
Perceived	W1	0.02	5.6	97.9	2.1
competence (RAPS)	W2	0.03	8.6	97.1	2.9
· · · · · ·	W3	0.03	8.4	97.1	2.9
	W1	0.01	4.5	98.8	1.2
Autonomy (RAPS)	W2	0.02	6.4	97.7	2.3
	W3	0.03	8.3	97.6	2.4
	W1	0.02	5.9	97.9	2.1
Engagement (PISA)	W2	0.01	4.5	98.2	1.8
•	W3	0.03	8.3	97.6	2.4
	W1	0.04	11.3	95.6	4.4
Relationships with	W2	0.06	17.2	89.9	10.1
teachers (PISA)	W3	0.06	18.0	93.6	6.4
	W1	0.00	6.7	97.3	
School legacy (PISA)	W1 W2				2.7
School legacy (FISA)	W2 W3	0.04 0.04	11.3	96.3 96.4	3.7
			11.3		3.6
	W1	0.01	2.9	99.2	0.8
Social self-efficacy	W2	0.01	4.8	98.8	1.2
	W3	0.02	5.4	98.3	1.7
	W1	<0.01	1.8	99.7	0.3
Subjective age	W2	<0.01	1.8	99.9	0.1
	W3	<0.01	1.0	100.0	0.0
	W1	0.02	5.1	99.2	0.8
Self-reliance	W2	0.02	7.2	97.4	2.6
	W3	0.03	9.1	96.9	3.1
	W1	0.01	2.9	99.1	0.9
Work orientation	W2	0.01	2.9	98.8	1.2
	W3	0.01	4.8	98.8	1.2
Personal	W1	0.01	4.6	98.4	1.6
responsibility	W2	0.02	5.9	97.6	2.4
	W3	0.03	8.1	97.9	2.1
	W1	0.01	3.2	99.2	0.8
Life satisfaction	W2	0.01	4.8	98.5	1.5
	W3	0.02	5.3	98.6	1.4
	W1	0.03	8.6	96.9	3.1
Self satisfaction	W2	0.02	7.5	97.7	2.3
	W3	0.04	11.6	96.0	4.0
	W1	0.05	14.3	94.9	5.1
School satisfaction	W2	0.06	15.9	94.6	5.4
	W3	0.05	14.6	94.8	5.2

Table 5.1: Extent of clustering within schools for each psychosocial outcome measure (N = 5472)

As shown, ICCs were generally small and within the expected range – in most cases, between .02 and .05. For all variables, with the exception of subjective age, the derived design effect was ≥ 2 in each wave, and tended to increase over time. This suggests that students within schools provided more similar answers to each other in more senior grades. For some outcomes – notably reports of student-teacher relationships and school satisfaction – a relatively high proportion of the variance was between schools, meaning that a higher degree of similarity in students' responses within each school was apparent. For other variables – for example, subjective age, work orientation, and global life satisfaction – very little variation was found between schools, with the vast majority of variation attributable to individual differences between students regardless of their school.

Standard analyses of variance and multiple regression techniques assume that all observations are independent of each other which is, by definition, not the case where observations are clustered. Because the design effect in almost all cases here was found to be greater than 2 - and, more particularly, given the inherently hierarchical nature of the schoolbased data (Bland, 2010; Nezlek, 2008) – all analyses reported below were specified to take account of this clustering. This correction produces inflated standard errors relative to those that would be calculated by a standard regression procedure, and thereby produce a wider margin of error around the point estimate for each parameter in the model. By increasing the uncertainty of the estimate in this manner to account for the non-independence of the observations, the risk of reporting a false positive result is lowered.

5.2 An introduction to Latent Growth Curve Modelling

For each measure, a series of latent growth models were constructed using students' responses over the three years of the study. These growth models comprised two latent (unobserved) factors for each outcome measure (Muthén & Curran, 1997). The latent factors in each model are the intercept – a student's initial status on the variable at the first time point – and the slope, the rate of change in ratings of the measure over time. For each model, both interindividual (mean) differences and intraindividual differences (variance) in the intercept and slope were estimated.

Figure 5.1, adapted from Seltzer, Choi and Thum (2003), illustrates three possible relationships between the initial status and slope of an outcome measure (in this example, scores on a test of reading achievement). In the first panel (far left), students' initial reading achievement is positively associated with changes in reading achievement over time. In other words, students with higher reading scores at baseline also tend to increase faster, leading to

a 'fanning out' of achievement scores several years later, as shown by the increasing distance between scores by the final timepoint. In the second panel (centre), initial status appears to be broadly unrelated to growth over time – all students increase their reading scores at a similar rate, and the baseline differences are maintained. In the third panel (far right), initial reading scores are negatively related to growth over time. Here, the students who had lower reading scores at baseline exhibit greater improvements over time than their peers who had higher initial scores. This results in a 'fanning in' of scores, narrowing the initial achievement gap considerably.

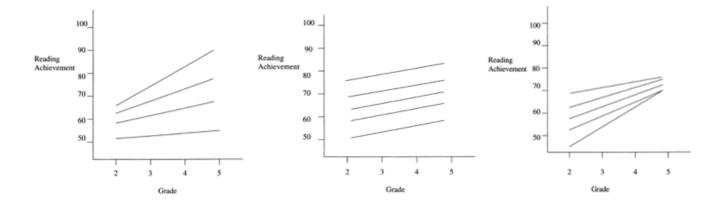


Figure 5.1: Three examples of possible relationships between initial status and slope on an outcome measure (adapted from Seltzer et al., 2003).

Figure 5.2 describes the general model structure used for analysis of the current data (described further in Section 5.3) in diagrammatic form. It follows the convention that observed variables are depicted as rectangles, latent variables are depicted as ovals, and regression paths are depicted as one-headed arrows (Curran & Bauer, 2007). As shown, both latent factors were derived from information provided for each outcome measure, by each student, for all three waves. These factors were subsequently regressed onto each of the selected set of covariates, and on students' status as Transition Year participants or non-participants. In this way, it should be possible to determine whether TY participation is associated with any differences in baseline status or in changes over time for each measure after accounting for the included covariates.

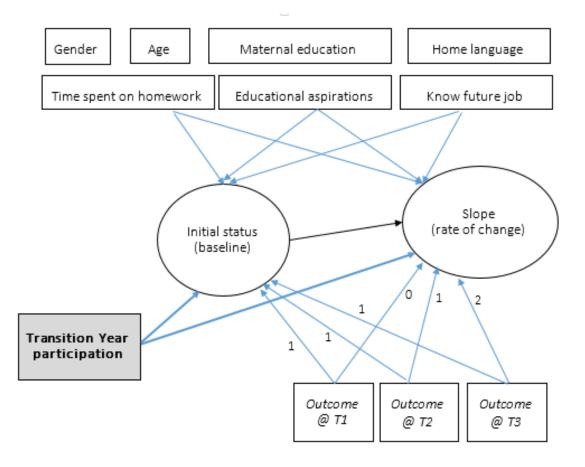


Figure 5.2: Simplified diagram of the latent growth curve modelling specifications used here. Paths from outcome measures to the initial status/slope latent factors are fixed at the values shown in line with standard growth curve specifications (see references in text). All other paths are freely estimated. Paths from latent factors to gender, age, maternal education and language are not shown, for clarity.

Finally, in order to control for pre-Transition Year differences between students who take part in the programme and those who skip it, this series of models was restricted to the 1563 students for whom three waves of data were available, beginning from Third Year.

5.2.1 Model-building and reporting strategy

A similar procedure was followed for each outcome measure in constructing the growth curves (Table 5.2). First, an unconditional model without any covariates or explanatory variables was constructed, hereafter referred to as Model A. The unconditional model serves as a reference point against which more complex versions of the model can be compared, in order to judge the extent to which the addition of covariates adds to our understanding of the processes being examined.

At this stage, the latent slope factor was also regressed on the initial status factor. This regression serves to control for differences in the effect of students' initial status (in

Third Year) on the subsequent rate of change over time (see Figure 5.1). In this way, the addition of covariates to the model in subsequent steps can be interpreted in terms of their relationship with change over time (the slope) regardless of students' initial high or low status on the outcome measure (Choi, Seltzer, Herman & Yamashiro, 2004; Curran & Muthén, 1999). By controlling for baseline differences in this manner, any difference in growth patterns attributable to TY participation can be identified more clearly.

	TUDIC SIE! IVI	ouch building strategy	
	Model A	Model B	Model C
	Initial status	Initial status	Initial status
Latent variables	Slope (controlling for initial status)	Slope (controlling for initial status)	Slope (controlling for initial status)
TY participation		TY participation	TY participation
		Male	Male
Domographia		Age (grand-mean centred)	Age (grand-mean centred)
Demographic information		Maternal education	Maternal education
(Wave 1)		Usually speaks English/Irish or another	Usually speaks English/Irish or another
		language at home	language at home
Attitudes to education/work (Wave 1)		Time spent on homework (grand-mean centred) Educational aspirations	Time spent on homework (grand-mean centred) Educational aspirations
		Decided on future career	Decided on future career
Interactions			TY participation * Male
(if the main age or gender terms are significant)			TY participation * Age

Table 5.2: Model-building strategy

In the second step, students' Transition Year participation status and key demographic and attitudinal variables were added to the model (Model B). As shown in Chapter 4, the selected variables are associated with Transition Year uptake. Including them in the model takes account of these differences directly, thereby avoiding the conflation of known characteristics of the type of student who takes part in TY with the effects of participation in the programme. Accounting for covariation in this manner allows a more accurate estimation of any differences that may be associated solely with Transition Year participation (although, as always, variables that are not recorded or included may also play a role). Although it is recognised that retaining non-significant variables goes against the principle of parsimony in model-building, the selected variables are considered as a set here for each measure in order to better isolate any associations with TY participation, and to better facilitate comparisons of associations with TY participation across different outcome measures. Demographic variables added at this point include students' gender, age at Wave 1, maternal educational qualification, and home language (coded as a binary measure: English/Irish or another language). Each variable was added as a covariate for both the latent intercept and the latent slope.

Age was grand-mean centered prior to entry in the model in order to facilitate interpretation. Grand-mean centering involves subtracting the overall sample mean from each students' individual age, which results in a variable for each participant representing relative difference from the overall mean. In this way, the basic intercept of the models shown below relate to the 'average' student (Garson, 2012). In the absence of centering, the results would refer to relationships between the outcome measure and students' age, starting from 0 years old. Given that all participants are in their early- to mid-teens, and considering the relatively restricted range of ages involved here, it makes more sense to center the age variable about the overall average, and thereafter interpret results in terms of individuals' distance from that average.

A positive coefficient for age represents a positive relationship between the outcome measure and being older than average, while a negative coefficient describes a positive relationship between the outcome and being younger than average. For ease of interpretation, it may be remembered that with an overall mean age of 15.45 years and standard deviation of .46 years (Table 4.1), a 14.99-year-old student is one standard deviation older than average.

The attitudinal variables added were the time spent on homework per week (also grand-mean centred), educational aspirations, and how sure the student is about the type of work they would like to do in adulthood.

Finally, the third iteration of the modelling process (Model C) examined the possibility of any interactions between TY participation and students' gender or age. Interactions were only considered where the basic coefficient (sometimes termed main effect) relating to students' gender or age was statistically significant. Where one of these basic terms was found to be significant, an interaction term was constructed which, if significant, would imply that the effects of TY participation differ for males and females or by students' age (Seltzer et al., 2003). More general information on testing and interpreting interactions can be found in Aiken and West (1991) or Preacher, Curran and Bauer (2006).

The most intuitive way to consider interaction terms may be as follows. First, consider that TY participation is coded as *1 for participants* and *0 for non-participants*, and gender is coded as *1 for males* and *0 for females*. It follows that:

- i) <u>Non-participating females</u> are the basic reference group. The intercept and all other coefficients in the model apply, but the coefficients for Male and TY participation do not because *multiplying them by 0* removes them from the regression equation.
- ii) For <u>females who participated in TY</u>, the TY term should be considered alongside the intercept and all other terms (except Male, *multiplied by 0*).
- iii) For <u>non-participating males</u>, the Male term should be considered along with all other terms (except TY, *multiplied by 0*).
- iv) Finally, for <u>males who participated in TY</u>, both the Male and TY terms should be considered and, in addition, the new interaction term (TY*Male) which only applies to this group.

Visual depiction of interactions is often the easiest way to interpret them. Where relevant, graphs showing interaction terms are included below.

As well as these parameter estimates for each model, the residual variance (also sometimes known as *error* or *random effects* in the terminology associated with such models) is shown. Residual variance is the variance in the outcome measure that remains 'unaccounted for' by the variables and relationships that have been modelled.

All analyses were performed using MPlus (version 6.11) (Muthén & Muthén, 2010).

5.2.2 Interpreting raw and standardised coefficients

All tables below show both the raw and the standardised coefficients resulting from the latent growth models as part of the 'final' version (either Model B, where no interactions were tested, or Model C with interactions). In the tables and text below, raw (unstandardised) coefficients are identified as 'b', and standardised coefficients as ' β ' (beta).

Raw coefficients describe the change in the raw scale of the outcome measures (e.g., a 1 to 5 scale) relative to the original unit of the covariate – for example, relative to years with regard to students' age, or to hours with regard to time spent on homework.

Standardised coefficients represent the same relationships and associations, but describe the change in the outcome measures in terms of their standard deviations relative to

a one standard deviation change in the covariate. Note that the standard deviations associated with students' age and hours spent on homework can be found in Chapter 4 (Table 4.1). By reporting standardised coefficients, it becomes possible to compare the relative strength of the relationship between the variable under examination and each of the selected covariates – showing, for example, whether age or gender are more strongly associated with changes over time (Hunter & Hamilton, 2002). Standardisation also facilitates comparison of the relative impact of a given covariate on different outcome measures that may not be measured on the same scale (e.g., a five-point scale vs a seven-point scale). Standardised coefficients should be interpreted as follows (Muthén & Muthén, 2010), using Table 5.5 (Section 5.3.2, below) as an exemplar:

- For continuous variables (age and hours spent on homework), the coefficient shown represents the difference in self-reliance, in standard deviations, that is associated with a difference of one standard deviation in the continuous covariate. For example, for self-reliance, Model C shows that a 1 SD increase in the number of hours spent on homework, above the average, is associated with an increase of .13 SD in baseline self-reliance.
- For binary or dummy variables (all other covariates), the coefficient shown represents the difference in self-reliance, in standard deviations, that is associated with the 'dummy' category compared to the reference category. For example, for self-reliance, Model C shows that the aspiration to complete a degree is associated with a change of .26 SD in the slope factor compared to students who aspire to complete the Leaving Certificate. This means that the rate of change in self-reliance over time is about one-quarter of a standard deviation higher among students who aspire to a degree.

5.2.3 Interpreting fit statistics

The tables presented below, in Section 5.3, include estimates of model fit from six different fit indices in addition to the coefficients associated with each variable in the model itself. These fit statistics – summarised in Table 5.3 – provide an indication of whether the specified model could be considered, broadly speaking, a 'good fit' or a 'bad fit' to the observed data. A good-fitting model is one that is consistent with the observed data. However, it must be remembered that even good-fitting models come with the caveat that other equivalent specifications could also be found to fit the data well, as well as the fact that the inclusion of any non-measured variables could produce better or alternative models.

Therefore, the most that can be concluded from a well-fitting model is that it provides a plausible representation of the relationships underlying the specified variables. The researcher's judgement, and previous theory on the research topic, are at least as important to model-building as statistical measures of model fit (Barrett, 2007; Tomarken & Waller, 2003).

Nested models – where a more complex model is built on, and includes all parts of, a simpler model – can be compared to each other by considering the relative change in indices across models. In each of the tables below, Model A is nested within Model B, which in turn is nested within Model C. Three fit indices shown below (loglikelihood, AIC, and BIC)³⁵ are relative measures used to compare nested models. Somewhat counter-intuitively, there is no ideal or target value which would indicate a well- or poorly-fitting model. Instead, these measures provide a comparison of two nested models by way of the difference in their values for each nested model. Smaller absolute values for loglikelihood, AIC, and BIC are taken to represent a better-fitting model than the one that came before, regardless of their starting value (Burnham & Anderson, 2004).

The other three measures shown here (RMSEA, CFI, and TLI)³⁶ do provide a guideline threshold for judging the quality of model fit (Schrieber, Nora, Stage, Barlow & King, 2006). CFI and TLI represent the extent to which the specified model represents the observed data as compared against a hypothetical null model in which all of the variables are assumed to be uncorrelated with each other. RMSEA estimates how well the specified model fits the population's covariance matrix (the relationships between all variables). RMSEA, CFI and TLI can be used to evaluate the fit of both nested and non-nested models. They are particularly recommended for use in evaluating latent growth curve models (Wu, West & Taylor, 2009). RMSEA is further strongly recommended on the grounds that it estimates the extent of model misfit in the population, rather than just the sample (Preacher et al., 2008), and also because it can be calculated to include a confidence interval rather than just a single point estimate.

For RMSEA, smaller values are indicative of a better-fitting model, while higher values represent superior fit for CFI and TLI. As a guideline, RMSEA \leq .06 is taken to mean a close fit, although some practitioners consider anything below .08 to be an acceptable approximation (Browne & Cudeck, 1992; Hooper, Coughlan & Mullen, 2008; Hu & Bentler,

³⁵ Loglikelihood, Akaike Information Criterion, and Bayesian Information Criterion.

³⁶ Root Mean Square Error of Approximation, Comparative Fit Index, and Tucker-Lewis Index.

1999). For both CFI and TLI, values \geq .90 may represent a reasonable fit, particularly when other indicators suggest a well-fitting model, but CFI \geq .95 is generally taken as a stricter guideline value for a good fit (Cheung & Rensvold, 2002; Hu & Bentler, 1999).

	Indicative of good model fit	Notes	
	Lower values (regardless of	Two loglikelihoods can be formally	
Loglikelihood	absolute number)	compared by comparing twice the	
	absolute number)	difference against a χ^2 distribution.	
AIC	Lower values (regardless of	Penalises overly-complex	
AIC	absolute number)	(non-parsimonious) models.	
BIC	Lower values (regardless of	Less sensitive to additional	
DIC	absolute number)	parameters than AIC.	
RMSEA	≤.06	Penalises overly-complex	
RIVISEA	≥.00	(non-parsimonious) models.	
CFI	≥ .95	Performs well at all sample sizes.	
TU	> 05	Penalises overly-complex	
I LI	≥ .95	(non-parsimonious) models.	

Table 5.3: Guidelines	for interpretin	ng model fit indices
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Browne & Cudeck (1992); Burnham & Anderson (2004); Hooper et al. (2008); Hu & Bentler (1999)

Along with the fit indices, the chi-square test of model fit, which is also sometimes reported for models within the structural equation modelling family (including growth curves), is reported below. A statistically significant chi-square ($p \le .05$) is considered a sign of model misfit, and a non-significant result (p > .05) indicates an acceptable model fit. This test is known to be extremely sensitive to sample size, meaning that with very large samples, as here, the chi-square test will frequently return a significant result even in the absence of a substantive misspecification (Barrett, 2007; Hooper et al., 2008; Tomarken & Waller, 2003). However, it is included in line with standard reporting conventions and best model-testing practice.

5.2.4 Additional reading

Latent growth curve modelling – together with associated techniques and concepts, such as structural equation modelling, multilevel modelling, autoregressive modelling, and latent class analysis – is the subject of an extensive and rapidly-growing literature. The previous sections have attempted to provide a brief, non-technical, but reasonably comprehensive introduction to the area. However, a full review of the literature is beyond the scope of this chapter.

For any readers interested in more in-depth and technical discussion, particularly with regard to longitudinal studies, I recommend a number of sources including the following suggestions. For book-length treatments of the subject, Preacher et al. (2008), Bollen and Curran (2006), Moskowitz and Hershberger (2002), Singer and Willett (2003), Duncan,

Duncan, Strycker, Li and Alpert (1999), Skrondal and Rabe-Hesketh (2004), and Byrne (2012) provide good overviews and technical detail, to varying degrees of complexity. A large number of accessible introductory and pedagogic articles are also available. Those by Duncan and Duncan (2009), Tomarken and Waller (2005), Curran and Hussong (2003), Willett, Singer and Martin (1998), Curran, Obeidat and Losardo (2010), McArdle (2009), Curran, Howard, Bainter, Lane and McGinley (2014), MacCallum and Austin (2000), Acock (n.d.), Raudenbush (2001), Muthén and Khoo (1998), and Muthén (2004) are particularly useful.

The references just given are primarily concerned with the conceptual, mathematical and statistical underpinnings of, and extensions to, latent growth modelling and related areas. For some practical examples of latent growth models in applied research papers, see, for instance, Schumann et al. (2008), Seltzer et al. (2003), or Lane et al. (2013).

5.3 Results

The following sections detail the results of the latent growth models for each outcome measure. Each section follows a similar pattern. A summary of the main findings is provided at the end, but more substantial discussion is reserved for Chapter 7.

5.3.1 Summary of results

Table 5.4 summarises the results reported more fully in the subsequent sections for the two primary outcomes of interest: the latent initial status and latent slope factors. A significant difference in initial status indicates that students who took part in TY reported significantly higher or lower baseline levels (starting points) of the attribute in question, near the end of Third Year, than students who did not subsequently take TY. A significant difference in slope indicates that the pattern of change in the particular attribute was different for TY participants and non-participants over the following two years, even after taking account of the baseline values.

	Initial status (Third Year)	Slope (change over two years)
Self-reliance	NS	<.05
Subjective age	NS	<.01
School legacy	<.001	NS
School belonging	<.01	NS
Perceptions of teacher support (PISA)	<.01	NS
Experience of teacher support (RAPS)	<.01	NS
Engagement in learning	<.01	NS
School satisfaction	<.01	NS
Global life satisfaction	<.01	NS
Self satisfaction	<.01	NS
Social self-efficacy	NS	NS
Perceived competence	NS	NS
Autonomous motivation	NS	NS
Work orientation	NS	NS

Table 5.4: Summary results of latent growth models for psychosocial variables showing where significant differences exist between TY students and non-TY students

p <.05 in **bold** and shaded. Differences that are not statistically significant are marked 'NS'.

As shown, TY participation was associated with different patterns of change over time for two measures: subjective age and perceived self-reliance. TY participants also reported significantly greater baseline levels of perceptions of school legacy, school belonging, experience of teacher support, cognitive engagement in learning, satisfaction with school, life satisfaction, and satisfaction with self than students who did not go on to take part in Transition Year. These differences are expanded on and clarified in the following sections, beginning with self-reliance.

5.3.2 Self-reliance

Recall from Chapter 3 that self-reliance was measured on a five-point scale, with 1 corresponding to 'entirely dependent on others' and 5 corresponding to 'completely self-reliant'. Higher scores therefore represent greater self-reliance. Table 5.5 reports both the raw and (for Model C only) the standardised coefficients resulting from the latent growth model for self-reliance.³⁷

³⁷ Recall that raw (unstandardised) coefficients are identified as 'b', and standardised coefficients as 'β' (beta).

The fit indices (Table 5.5) suggest that Model C represents a very good fit to the data, with a non-significant chi-square ($\chi^2(16) = 26.25$, ns) and CFI and TLI values above the .95 guideline. The estimated RMSEA value was below .06, including the upper end of the 90% confidence interval. Similarly, the AIC, BIC and loglikelihood show large decreases compared to the unconditional model.

Significant variation between students in self-reliance was evident for both the initial status and the slope, as shown by the statistically significant values for residual variance in Model C. The final model accounted for 13% ($R^2 = .13$, t = 5.51, p <.001) of the variance in students' initial self-reliance, and 8% ($R^2 = .08$, t = 2.70, p <.05) of the variance in rates of change over time.³⁸

³⁸ The R² ('R-squared') statistic is a measure of how closely the observed data correspond to the fitted regression lines that are displayed in tabulated format in Table 5.5 to Table 5.8 (and graphically in the accompanying figures). They can be interpreted as the percentage variance in the outcome measure that is accounted for (or 'explained by') the covariates included in the model. The corollary of this is that additional variables or model specifications would be needed to explain the remaining variance.

		Model A	Model B	Model C	
		b (SE)	b (SE)	b (SE)	β (SE)
	Intercept	3.55 (.03)***	3.53 (.07)***	3.53 (.07)***	7.24 (.24)***
	TY participant (Ref: non-participant)	-	01 (.04)	01 (.04)	02 (.08)
	Male (Ref: female)	-	05 (.05)	05 (.05)	09 (.10)
	Age (centered)	-	.07 (.04)	.07 (.04)	.06 (.03)
	Maternal education (<i>Ref: Upper sec.</i>)				
	Primary/ Lower secondary	-	04 (.06)	04 (.06)	09 (.12)
	Third level	_	.08 (.03)*	.08 (.03)*	.16 (.07)*
Initial	Home language (<i>Ref: English/Irish</i>)				(,
status	Another language	-	.01 (.01)	.01 (.01)	.02 (.03)
(baseline)	Weekly hours homework (centered)	_	.01 (.00)**	.01 (.00)**	.13 (.05)**
buschine	Educational aspirations (<i>Ref: LCE</i>)		.01 (.00)	.01 (.00)	.15 (.05)
	PLC/Certificate		.09 (.08)	.09 (.08)	.18 (.16)
	-	-	.03 (.08)	.09 (.08) .23 (.07)**	.18 (.10) .47 (.15)**
	Degree	-			
	Don't know	-	.10 (.10)	.10 (.10)	.20 (.20)
	Know what job would like (<i>Ref: Yes</i>)		44 (04)***	44/04/***	20 (00)***
	Maybe	-	14 (.04)***	14 (.04)***	29 (.09)***
	No	-	13 (.05)*	13 (.05)**	26 (.11)*
	Intercept	.28 (.14)	.03 (.22)	.07 (.22)	.41 (1.12)
	Initial status	07 (.04)	03 (.06)	03 (.06)	08 (.16)
	TY participant (Ref: non-participant)	-	.06 (.02)**	.01 (.03)	.03 (.15)
	Male (<i>Ref: female</i>)	-	.01 (.03)	08 (.03)**	46 (.20)
	TY * Male	-	-	.11 (.03)***	.65 (.23)**
	Age (centered)	-	.04 (.02)*	.04 (.02)*	.10 (.05)
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	00 (.05)	00 (.04)	02 (.26)
Slope	Third level	-	01 (.03)	01 (.03)	08 (.16)
(rate of	Home language (Ref: English/Irish)				
change)	Another language	-	.01 (.00)	.01 (.01)	.04 (.04)
	Weekly hours homework (centered)	-	.00 (.00)	.00 (.00)	.03 (.06)
	Educational aspirations (<i>Ref: LCE</i>)		. ,	. ,	. ,
	PLC/Certificate	-	.06 (.04)	.07 (.04)	.38 (.22)
	Degree	-	.04 (.04)	.05 (.03)	.26 (.18)
	Don't know	_	.08 (.05)	.09 (.05)	.51 (.25)*
	Know what job would like (<i>Ref: Yes</i>)		.00 (.05)	.05 (.05)	.51 (.25)
	Maybe	_	.01 (.04)	.01 (.04)	.06 (.23)
	No		.01 (.04)	.01 (.04)	.00 (.23)
(Desidual)		.25 (.01)***	+	+	
(Residual) Varianco	Initial status	• •	.21 (.02)***	1	(.02)*** (01)*
Variance	Slope	.03 (.01)***	.03 (.01)*	<u>+</u>	(.01)*
	Chi-square (degrees of freedom)	4.03 (1)	23.58 (14)		25 (16)
	Chi-square p-value	<.05	>.05		.05
	Loglikelihood	-2819	-2202	-2200	
Fit	AIC	5653	4472	4469	
statistics	BIC	5696	4645		647
	RMSEA (RMSEA 90% confidence interval)	.044 (.006, .093)	.024 (.000, .040)		000, .038)
	CFI	.998	.989		988
	TLI	.994	.967		967

* p ≤.05 ** p ≤.01 *** p ≤.001

Initial status: Slope: R² = .13, t = 5.51, p < .001. R² = .08, t = 2.70, p <.05.

The latent growth model shows that, when the selected background characteristics are taken into account, the average baseline (Third Year) level of self-reliance for all students was about 3.53 on the 5-point scale, corresponding to moderately positive views of their own self-reliance. The difference in baseline self-reliance between students who went on to take Transition Year and those who didn't was negligible (b = -.01, β = -.02, ns). Factors that were significantly associated with a higher initial level of self-reliance included maternal education up to third-level, greater time spent on homework, aspirations to complete a third-level degree, and knowing what sort of career was desired after school.

In general, the slope factor shows that, all else being equal, reported self-reliance tended to increase slightly, but not significantly, over time (b = .07, β = .41, ns). Over and above this, Transition Year participation was significantly associated with changes in self-reliance over time. Model B shows that TY participants reported a significantly greater increase in self-reliance over the two years (b = .06, p < .05) than non-participants.

Closer examination (Model C) revealed this association to be a function of the interaction between Transition Year participation and gender (Figure 5.3). Self-reliance was found to decrease for non-participating male students over time (b = -.08, β =-.46, p <.01) but the statistically significant, and positive, interaction term shows that the opposite pattern of change occurred among males who took part in TY (b = .11, β = .65, p <.001). This interaction between TY participation and gender shows the strongest association with change in self-reliance of any single covariate, at two-thirds of a standard deviation (β = .65). Female students experienced similar trajectories whether or not they took part in TY.

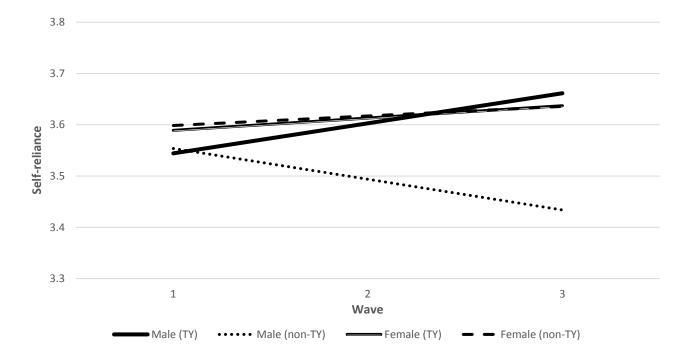


Figure 5.3: Latent growth curves for self-reliance, by TY participation and gender

The only other factor that was significantly associated with change in self-reliance over time was students' age. Students who were older than average tended to increase in self-reliance somewhat faster than their peers (b = .04, β = .10, p = .05), by about one-tenth of a standard deviation for each additional six months in age. An interaction of age and Transition Year participation was tested, but the interaction term was not statistically significant and overall model fit disimproved with its inclusion, so this term was omitted from Model C. Baseline self-reliance was not significantly associated with changes over time (b = -.03, β = -.08, ns).

In summary, Transition Year participation is particularly associated with positive outcomes for male students with regard to self-reported self-reliance. Male students in Third Year reported similar levels of self-reliance. However, those who took part in TY reported significant increases in self-reliance over the following two years, while those who went straight to Fifth Year reported significant decreases in self-reliance. This effect was not apparent for female students.

5.3.3 Subjective age

Subjective age was measured on a seven-point scale (see Chapter 3). Lower values signify that the respondent feels younger than their actual age, while higher values signify feelings of being older than their chronological age. The average intercept for subjective age initial

status here was about 4.4 on the seven-point scale (Table 5.6), meaning that students tended on average to feel slightly older than they actually were.

As neither gender nor age were significant in Model B, for either the initial status or the slope factors, no interactions were examined. Therefore, Model B was retained as the final model. The fit statistics show it to be an acceptable fit to the data. Loglikelihood, AIC, and BIC decreased substantially with the addition of the selected covariates, indicating improvements to the model. The chi-square test of model fit was non-significant ($\chi^2(14) =$ 6.34, ns) and the RMSEA, CFI and TLI values were at their respective lower and upper limits, signifying no major problems with model fit.

Significant interindividual variation in initial subjective age was found (Model B residual variance = .42, p <.001). In contrast, variance for the slope factor was very low and not statistically significant (Model B residual variance = .03, ns), meaning that students tended to follow a very similar pattern of change in subjective age regardless of their perceived age in Third Year. The final model accounted for about 8% (R^2 = .08, t = 3.52, p <.001) of the variance in baseline subjective age, and 12% (R^2 = .12, t = .68, ns) of the variance in the slope.

		Model A	Мо	del B
		b (SE)	b (SE)	β (SE)
	Intercept	4.23 (.03)***	4.38 (.08)***	6.49 (.34)***
	TY participant (Ref: non-participant)	-	09 (.06)	14 (.09)
	Male (<i>Ref: female</i>)	-	06 (.06)	08 (.09)
	Age (centered)	-	.28 (.06)***	.18 (.04)***
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	.04 (.04)	.06 (.06)
	Third level	-	.02 (.05)	.03 (.08)
Initial	Home language (Ref: English/Irish)			
status	Another language	-	.02 (.01)	.04 (.02)
(baseline)	Weekly hours homework (centered)	-	01 (.01)*	11 (.05)*
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	.06 (.09)	.08 (.13)
	Degree	-	.16 (.07)*	.24 (.10)*
	Don't know	-	07 (.12)	10 (.17)
	Know what job would like (Ref: Yes)		- ()	- ()
	Maybe	-	18 (.07)**	26 (.10)*
	No	-	16 (.07)*	23 (.11)*
	Intercept	.07 (.35)	18 (.36)	-1.02 (2.51)
	Initial status	00 (.08)	.03 (.09)	.10 (.37)
	TY participant (Ref: non-participant)	-	.11 (.04)*	.62 (.40)
	Male (<i>Ref: female</i>)	-	.00 (.03)	.02 (.18)
	Age (centered)		03 (.05)	06 (.13)
	Maternal education (<i>Ref: Upper sec.</i>)	-		
	Primary/ Lower secondary	-	.00 (.05)	.01 (.25)
	Third level		00 (.03)	02 (.17)
Slope	Home language (Ref: English/Irish)	-	. ,	()
(rate of	Another language	-	01 (.01)	04 (.06)
change)	Weekly hours homework (centered)		00 (.07)	03 (.09)
	Educational aspirations (Ref: LCE)	-		
	PLC/Certificate	-	.10 (.07)	.57 (.42)
	Degree	-	.05 (.06)	.28 (.27)
	Don't know		.10 (.08)	.57 (.53)
	Know what job would like (Ref: Yes)	-	- (/	- (/
	Maybe	-	00 (.04)	01 (.25)
	No	-	05 (.05)	26 (.26)
(Residual)	Initial status	.47 (.06)***		(.05)***
Variance	Slope	.04 (.04)		(.03)
	Chi-square (degrees of freedom)	.67 (1)	6.34 (14)	
	Chi-square p-value	>.05	>.05	
	Loglikelihood	-3801	-2946	
Fit	AIC	7618	5959	
statistics	BIC	7661	6133	
	RMSEA (90% confidence interval)	.000 (.000, .062)		000, .000)
	CFI	1.000	1.000	
	TLI	1.003		034
	161	1.005	1.	

Table 5.6: Latent growth curve models for subjective age (N=1218)

* p ≤.05

** p ≤.01 *** p ≤.001

R² = .08, t = 3.52, p <.001. R² = .12, t = .68, ns. Initial status: Slope:

Baseline perceptions of subjective age in Third Year did not differ between students who subsequently took part in TY and non-participants (b = -.09, $\beta = -.14$, ns). Factors that were significantly associated with a higher subjective age included a greater chronological age, spending less time on homework, aspirations to complete a third-level degree, and knowing what job the student wanted after school.

The intercept for the slope factor (b = -.18, ns) showed that subjective age tended to decrease slightly over time on average, although not significantly so. Baseline levels of subjective age were not significantly associated with the subsequent rate of change (b = .03, β = .10, ns).

However, Transition Year participation was found to be significantly associated with increases in subjective age (b = .11, β = .62, p <.05). In contrast, subjective age decreased slightly among their peers who skipped the additional year, as shown by the negative basic intercept coefficient for the slope factor (b = -.18, ns). That is, the perceived age of TY participants, relative to others, tended to increase from Third Year on (Figure 5.4). No other covariates were significantly associated with changes over time.

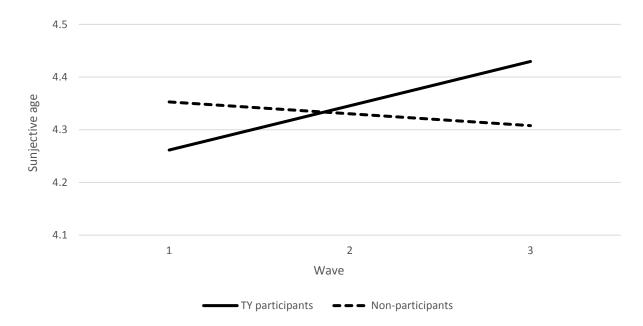


Figure 5.4: Latent growth curves for subjective age, by TY participation

In summary, students who took part in TY showed differing patterns of change in subjective age over than their classmates who skipped TY. By Fifth Year, TY participants were more likely to feel subjectively mature, in comparison to non-participants, despite starting from a slightly lower baseline.

A crossover point can be observed at Wave 2, where participating students who were coming near the end of their Transition Year reported (on average) feeling older than their former classmates in Fifth Year did (displayed graphically in Figure 5.4). In Wave 3, Transition Year participants coming to the end of Fifth Year would, in most schools, be mixed with younger students who had skipped TY to move straight to the senior cycle – presumably further supporting perceptions of relative maturity. For non-participants, the same process may have occurred in the opposite direction in Wave 2 and Wave 3 as they mixed with former TY participants from Fifth Year on.

5.3.4 School legacy

School legacy – the extent to which students feel that their school careers will prove useful to them in adult life – was measured on a five-point scale. Higher values denote a greater perceived value of the school experience. The initial status intercept here was 3.6 (Table 5.7, Model B) which, mapped onto the 5-point scale, translates to a positive impression of the school experience. As with subjective age, Model B was retained as the final version of the model for the school legacy scale, without interactions, due to the non-significant terms for gender and age for both latent factors.

	_	Model A Model B		
		b (SE)	b (SE)	β (SE)
	Intercept	3.93 (.03)***	3.62 (.13)***	5.23 (.45)***
	TY participant (Ref: non-participant)	-	.34 (.08)***	.50 (.10)***
	Male (<i>Ref: female</i>)	-	04 (.04)	06 (.06)
	Age (centered)	-	.05 (.05)	.03 (.03)
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	06 (.07)	09 (.10)
	Third level	-	08 (.05)	12 (.08)
Initial	Home language (Ref: English/Irish)			
status	Another language	-	.01 (.02)	.01 (.03)
(baseline)	Weekly hours homework (centered)	-	.02 (.00)***	.14 (.04)***
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	.07 (.11)	.11 (.16)
	Degree	-	.23 (.08)**	.34 (.11)**
	Don't know	-	.01 (.11)	.02 (.16)
	Know what job would like (Ref: Yes)			
	Maybe	-	01 (.05)	02 (.07)
	No	-	12 (.07)	18 (.10)
	Intercept	.63 (.15)***	.54 (.19)**	2.00 (.49)***
	Initial status	17 (.04)***	16 (.05)**	41 (.11)***
	TY participant (Ref: non-participant)	-	.06 (.05)	.23 (.17)
	Male (Ref: female)	-	03 (.04)	09 (.13)
	Age (centered)	-	.03 (.03)	.05 (.04)
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	07 (.06)	25 (.24)
Clana	Third level	-	.01 (.03)	.03 (.12)
Slope (rate of	Home language (Ref: English/Irish)			
change)	Another language	-	.00 (.01)	.02 (.03)
chungej	Weekly hours homework (centered)	-	.00 (.00)	.01 (.07)
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	.03 (.05)	.12 (.21)
	Degree	-	01 (.04)	04 (.16)
	Don't know	-	.12 (.06)	.45 (.25)
	Know what job would like (Ref: Yes)			
	Maybe	-	.03 (.05)	.10 (.18)
	No	-	.02 (.05)	.09 (.17)
(Residual)	Initial status	.46 (.06)***		.06)***
Variance	Slope	.07 (.01)***		.02)**
	Chi-square (degrees of freedom)	9.16 (1)		5 (14)
	Chi-square p-value	<.01		.05
	Loglikelihood	-3884		041
Fit	AIC	7784	6150	
statistics	BIC	7827		324
	RMSEA (90% confidence interval)	.07 (.04, .12)	.03 (.01, .04)	
	CFI		.990 .970	
	TLI	.971	.0	911

* p ≤.05 ** p ≤.01 *** p ≤.001

Initial status:

R² = .12, t = 3.90, p <.001. R² = .20, t = 3.06, p <.01. Slope:

Model fit was not as good as for the previous models; the chi-square test was significant ($\chi^2(14) = 28.45$, p <.05) and the TLI value below the ideal value (.91). However, CFI (.97) and RMSEA (.03) were within the guideline values, while the relative fit indices (loglikelihood, AIC and BIC) decreased substantially with the addition of the covariate set to the unconditional model. The model can therefore be considered broadly acceptable in its current form. Comparison of the observed sample mean scores plotted against the model-estimated mean scores suggest that the issue is most likely the presence of a slight curvilinear relationship (increasing between Wave 1 and Wave 2, before decreasing between Wave 2 and Wave 3) that is not accounted for by the linear growth model specified here, which smooths these changes into a straight line. Unfortunately, higher-order model specifications, including curvilinear terms, require at least four waves of repeated measures, and so it is not possible to investigate this relationship any further with the current three-wave data.

Reading from Model B, Transition Year participation was found to be significantly and positively associated with the initial status factor. Third Year students who went on to take part in TY reported greater perceptions that their school experience would prove useful to them in later life, by about half a standard deviation (b = .34, β = .50, p <.001). That is, students who had less positive perceptions of how useful school would be to them were more inclined to move directly to senior cycle after the Junior Certificate, rather than taking part in the extra year in Transition Year.

Unlike the models for self-reliance and subjective age, there were no significant differences here between participants and non-participants over time (b = .06, β = .23, ns). The gap in terms of perceived school legacy between the two groups of students was therefore broadly maintained into the senior cycle (Figure 5.5).

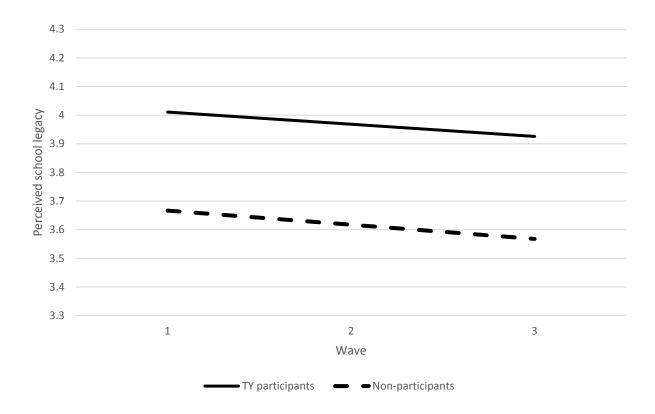


Figure 5.5: Latent growth curves for school legacy, by TY participation

Initial status was negatively related to the rate of change over time (b = -.16, β = -.41, p <.01), meaning that students who, in Third Year, felt less strongly that their school experience would prove valuable tended to narrow the gap by the time they left school compared those who initially felt more strongly about it. Two other variables were significantly, and positively, related to perceptions of the school legacy – time spent on homework, and maternal qualifications up to degree level.

Significant residual variance remained for both latent factors. Nonetheless, the final model accounted for substantial proportions of the observed variance – about one-eighth (R^2 = .12, t = 3.90, p <.001) of the variance in initial status, and one-fifth (R^2 = .20, t = 3.06, p <.01) of the variance in the slope.

5.3.5 School belonging

The final model described fully in this chapter is the growth model for affective engagement with school, as measured by the PISA school belonging scale. Recall that students were asked to rate, on a one to five scale, their responses to a range of statements relating to affective engagement. Higher scores represent greater feelings of belonging in school. The intercept for the initial status factor (Table 5.8; Model B) was 3.55, indicating generally positive feelings towards being in school.

Transition Year participation was associated with a significantly higher baseline level of school belonging (b = .15, β = .30, p <.01). That is, students who reported a greater sense of affective engagement, or feeling as though they belonged, at school in Third Year were more likely to opt into the extra year than students who felt less comfortable at school. Two other variables were significantly associated with school belonging: older students tended to report a greater sense of belonging (b = .13, β = .11, p = .001), as did students who spent more time on homework and study in Third Year (b = .01, β = .18, p <.001).

No significant differences were observed between TY participants and nonparticipants with regard to the slope factor (b = .04, β = .18, ns), meaning that both groups of students reported similar trajectories of change in affective engagement over time. These trajectories tended towards an increasing sense of belonging, but not significantly so (b = .21, ns). Three variables were significantly associated with increases in a student's sense of school belonging over time: maternal education until at least upper secondary level, not knowing what level of educational attainment s/he desired, and speaking a language other than English or Irish at home.

	-	Model A	odel A Model B	
		b (SE)	b (SE)	β (SE)
	Intercept	3.66 (.04)***	3.55 (.09)***	7.00 (.032)***
	TY participant (<i>Ref: non-participant</i>)	-	.15 (.06)**	.30 (.11)**
	Male (<i>Ref: female</i>)	-	.02 (.05)	.03 (.09)
	Age (centered)	-	.13 (.04)***	.11 (.03)***
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	03 (.05)	06 (.10)
	Third level	-	00 (.05)	01 (.10)
Initial	Home language (Ref: English/Irish)			
status	Another language	-	00 (.01)	00 (.03)
(baseline)	Weekly hours homework (centered)	-	.01 (.00)***	.18 (.04)***
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	06 (.10)	11 (.19)
	Degree	-	.07 (.07)	.14 (.14)
	Don't know	-	11 (.11)	21 (.22)
	Know what job would like (Ref: Yes)			
	Maybe	-	02 (.03)	03 (.07)
	No	-	09 (.05)	17 (.09)
	Intercept	.29 (.21)	.21 (.19)	.98 (.73)
	Initial status	09 (.06)	08 (.06)	19 (.12)
	TY participant (Ref: non-participant)	-	.04 (.03)	.18 (.12)
	Male (<i>Ref: female</i>)	-	.02 (.02)	.09 (.11)
	Age (centered)	-	.02 (.03)	.05 (.06)
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	09 (.04)*	40 (.24)
Slope	Third level	-	.01 (.03)	06 (.13)
(rate of	Home language (Ref: English/Irish)			
change)	Another language	-	.02 (.01)**	.08 (.03)**
change)	Weekly hours homework (centered)	-	.00 (.00)	.01 (.05)
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	.07 (.04)	.31 (.23)
	Degree	-	.03 (.04)	.16 (.19)
	Don't know	-	.11 (.05)*	.54 (.27)*
	Know what job would like (Ref: Yes)			
	Maybe	-	01 (.03)	07 (.16)
	No	-	01 (.02)	04 (.10)
(Residual)	Initial status	.26 (.02)***		(.03)***
Variance	Slope	.04 (.02)*	-	(.02)*
	Chi-square (degrees of freedom)	.866 (1)	14.41 (14)	
	Chi-square p-value	>.05	>.05	
	Loglikelihood	-3001	-2	342
Fit	AIC	6019	4752	
statistics	BIC	6062		926
	RMSEA (90% confidence interval)	.000 (.000, .065)	.005 (.000, .028)	
	CFI	1.000	.999	
	TLI	1.000	.0	998

Table 5.8: Latent growth curve models for school belonging (N=1226)

* p ≤.05 ** p ≤.01

*** p ≤.001

R² = .10, t = 4.00, p <.001 R² = .11, t = 2.61, p <.01. Initial status: Slope:

As noted above, age was found to be significantly positively associated with school belonging. An interaction term between students' age and Transition Year participation was thus calculated and tested. The interaction was not statistically significant, and visual inspection of the trajectories plotted without (Figure 5.6) and with the interaction term further suggested that the interaction term made no substantive difference to the model. Therefore, for simplicity, Model B was retained as the final version.

Figure 5.6 displays the interrelationships between TY participation, age, and school belonging. The graph plots the growth curves for school belonging for 'young' and 'old' students, together with their subsequent status with regard to TY participation. 'Young' and 'old' here are defined as, respectively, those who were +1 or -1 standard deviation from the centered mean age (i.e., about six months older or about six months younger than average).

Transition Year participants reported greater feelings of school belonging in Third Year than non-participants, as did older students compared to younger students. The association at baseline between school belonging and TY participation was relatively stronger than that between belonging and students' age (compare $\beta = .30$ to $\beta = .11$, as per Table 5.8). This is borne out by the fact that the 'young' TY participants reported a higher baseline sense of school belonging than the 'old' non-participants, who in turn reported a greater sense of belonging than the 'young' non-participants (Figure 5.6). All four groups followed broadly similar, and minor, trajectories of change in school belonging over the following two years.

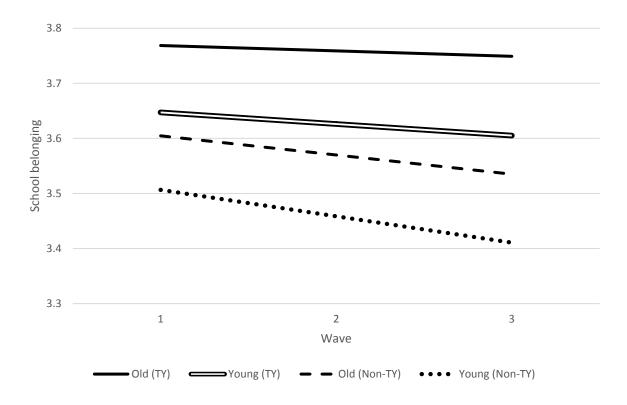


Figure 5.6: Latent growth curves for school belonging, by TY participation and student age. 'Old' students are one standard deviation older than the mean age; 'Young' students are one standard deviation younger than the mean age.

Significant levels of residual variance remained for both the initial status and the slope, suggesting significant variation between individual students around the general growth trajectories. The final model accounted for about 10% ($R^2 = .10$, t = 4.00, p <.001) of the variance in baseline levels of school belonging, and 11% ($R^2 = .11$, t = 2.61, p <.01) of the variance in the rate of change over time.

The fit indices show that the final model provides a very good fit to the data. The chi-square test was non-significant ($\chi^2(14) = 14.41$, ns), while the RMSEA (<.01), CFI (.999) and TLI (.998) values also indicate good model fit.

5.3.6 Summary of remaining outcome measures

The remaining outcome measures are not presented here in full, both for reasons of space and to minimise repetition. Tabulated versions of the final models in each case are presented in Appendix I.

As noted in Table 5.4, significant baseline differences in several measures – perceptions and experience of teacher support, engagement in learning, school satisfaction,

life satisfaction, and self satisfaction – were found between Transition Year participants and non-participants. These models find differences in the outcome measure at Third Year, similar to the models for school legacy and school belonging reported in Tables 5.7 and 5.8, but no differences in the rate of change over time between TY participants and nonparticipants. Only two measures, described above, showed differing patterns in the rate of change associated with TY participation over the course of the study: self-reliance (Table 5.5) and subjective age (Table 5.6). For the remaining outcome measures (social self-efficacy, perceived competence, autonomous motivation, and work orientation), no significant differences were found to be associated with TY participation, either at baseline, in Third Year, or over time.

5.4 Summary of key findings

This chapter presented the results of latent growth models for each of the measured psychosocial outcome variables. First, examination of the extent of clustering on a given measure - the degree to which students within a school resemble each other in comparison to the broader sample - revealed several patterns. The degree of clustering was generally quite small. However, clustering tended to increase over time for most outcome measures, indicating that students within a school reported increasingly similar attitudes as they moved up through the grade levels. Some measures - for example, life satisfaction - showed very little clustering, suggesting that almost all of the variation in life satisfaction occurs between individual students, rather than between schools. In contrast, a number of measures, notably school satisfaction and relationships with teachers, exhibited substantial degrees of clustering, with 5-10% of the variance occurring between schools. This indicates, perhaps unsurprisingly, that students within schools tended to report levels of school satisfaction that were more similar to those given by their classmates than by students in other schools - in other words, levels of satisfaction or dissatisfaction are partially a function of the school environment. These patterns required that statistical correction be made in the models to take account of the school-level clustering of student responses, in order to avoid spurious findings based on a mistaken assumption of complete independence of observations.

Separate latent growth models were constructed for each outcome measure. In each case, background factors (student gender, age, maternal education, and home language), students' attitudes to education and work (time spent on homework, educational aspirations, and career decisions), and their baseline (Third Year) measurements on the outcome in question were taken into account.

When these factors were controlled for, significant differences in the slope (patterns of development over time) between TY participants and non-participants were found for only two outcome measures – self-reliance and subjective age. For self-reliance, an interaction with gender was observed. Boys who took part in TY reported significant growth in self-reliance over the two years of the study, while boys who skipped TY reported significant decreases in self-reliance over the same period. In contrast, TY participation was not associated with any changes in self-reliance among girls. Participation in TY was associated with significant growth in subjective age (a students' self-perceived sense of how old or mature they feel, by comparison to their peer group) for both male and female students.

No significant differences in terms of changes over time were found for any of the other outcome measures, after controlling for baseline differences. However, significant differences were found in these baseline measurements for several outcomes. All else being equal, students who went on to take part in TY reported a significantly higher sense of school legacy (how well their time in school is preparing them for adult life), a greater affective sense of belonging at school, stronger relationships with their teachers, stronger cognitive engagement in learning, greater satisfaction with school, more satisfaction with themselves, and a stronger sense of wellbeing (life satisfaction) while they were still in Third Year, before moving on to TY. Thus, the students who take part in TY appear to be a qualitatively different group in some respects, even when background characteristics and attitudes are accounted for, than their classmates who skip the extra year. As noted in Chapter 1, this may reflect some degree of selection or encouragement for more engaged students by schools, as well as being a function of students' own preferences.

No differences were found between TY participants and non-participants – either in initial status or in patterns of change over time – for the social self-efficacy, perceived competence, autonomous motivation, or work orientation measures. The lack of significant differences between the two groups for these outcomes was unexpected, considering the strong qualitative evidence reported in Chapter 1 suggesting potential benefits in these respects arising from TY participation, as well as the conceptual links between the rationale for Transition Year and the outcome measures used here.

The next chapter, Chapter 6, examines students' self-reported views on the Transition Year programme in their own schools over the same period of time covered by these growth models. Students' reports describe the sorts of activities that are available and their interactions with teachers, among other aspects of the TY experience, and provide a clearer view of the context within which the findings of these growth models should be interpreted. To this end, the results of the growth models and the findings reported in Chapter 6 are considered together, and discussed in greater depth, in Chapter 7.

Chapter 6: The Transition Year experience: Perceptions and variation

Following the growth models of psychosocial development reported in Chapter 5, we turn now to students' subjective perceptions of the Transition Year experience. Their selfgenerated reports provide a context in which to interpret their ongoing development by clarifying the day-to-day thoughts and activities experienced during TY. Differences in the TY experience between each of the participating schools are a particular focus of this chapter, as is the extent to which students feel they get the Transition Year that they expect. With this in mind, specific aspects of the programme that are frequently criticised or endorsed are noted throughout. These reports mean that the quantitative measurements of the growth models can be compared to students' own qualitative perceptions of change, and outcomes, that they recognise in themselves.

From here, Chapter 6 is organised into five main sections. The first describes the data and methods used to conduct the analyses reported here. The next three sections deal with students' views before, during, and after Transition Year, respectively. In each case, quantitative cross-sectional comparisons of perceptions of the TY experience are first presented, providing the broader context in which to interpret students' specific comments on the programme. Thematic analyses of the more detailed self-generated comments are then reported. Some quotes are used for illustrative purposes, and recurring themes are highlighted. Finally, the last section integrates the key findings and draws an overall picture of students' perceptions of Transition Year.

6.1 Data and methodology

The participation in this study of students at four different grade levels provided the opportunity to compare students' attitudes to Transition Year before they had the opportunity to participate in the programme (Third Year), during the programme (TY), and after having had the opportunity of participation (Fifth Year and Sixth Year). The following sections are grouped by these three categories of the student experience. The analyses presented take further advantage of this range of student experience by examining opinions of TY from two complementary points of view.

The first approach, presented in Section 6.2.1, Section 6.3.1, and Section 6.4.1, explores the extent to which certain statements relating to Transition Year were endorsed by

participants on a Likert scale. The statements vary by year group and were written for this study to address some of the issues that are most commonly-reported as being relevant to students at the respective grades. This set of analyses draws on all available data, making use of student-level records from each of the three waves covering all four participating grade levels. In total, 9058 individual data points are available, representing 5472 individual students.³⁹

The second approach presented in each section follows from the additional opportunity offered to all participating students to articulate and expand on their opinions with open-ended written comments. These comments provide a more direct route to exploring students' attitudes. Participants were prompted to write about what they would like to see in a TY programme, the best and worst aspects of the year, what aspects of the programme they would have liked to experience if they did not take part, and so on. Their responses are considered in Sections 6.2.2-6.2.4, Sections 6.3.2-6.3.4, and Sections 6.4.2-6.4.5. Students' views are presented under headings that reflect each of the questions posed, and the key themes under each heading are highlighted.

A large majority of students took the opportunity to comment on some aspect of Transition Year: 1400 Third Year students (90%), 2081 TY students (91%), and 3978 students at Fifth/Sixth Year (77%). Because of the large numbers involved, it was not feasible to transcribe and code every response for this chapter; therefore, a purposive subsample of students was selected for this portion of the analysis. The purposive sampling of participants for qualitative analyses, as a subset of a larger sample drawn using probability sampling techniques for quantitative analyses, is an example of what Teddlie and Yu (2007) call *concurrent mixed methods sampling* (p. 92).

Several factors informed the composition of this subsample. Preliminary readings of the responses suggested that approximately 15-20 students per school would be sufficient to provide a representative flavour of the particular school experience, with a high degree of similarity apparent among many responses within any given school. Where schools had higher numbers of participating students, a subset of respondents was selected randomly for transcription, with a small number of supplementary transcriptions included if a key theme relating to the school was not represented at that point. In all cases, and particularly where

³⁹ See Chapter 3, particularly Section 3.4, for more detail.

more variation of attitudes within a school was evident, care was taken to ensure that each of the main points articulated by respondents was reflected in the transcribed comments. In addition, a number of schools were selected as being of particular interest at each grade level due to unusual or more extreme patterns of student responses, as reported in the sections below reporting the initial Likert response items. These schools were treated as priorities in order to ensure that the breadth and extent of the unusual student attitudes within these schools was represented clearly.

In total, the open-ended responses of 303 Third Year students, 345 Transition Year students, and 349 Fifth Year students were transcribed. All 20 participating schools are represented in these transcripts. All Third Year student responses came from Wave 1 and, generally, Transition Year student responses from Wave 2 and Fifth/Sixth Year student responses from Wave 3 were prioritised in order to most closely reflect the movement of the cohort that is described in Chapter 5.

To facilitate a clear and informed reading of the remainder of this chapter, schools are identified below using anonymised identification codes and are referred to in text by these ID codes, where relevant. Summary school-level characteristics of factors that are known to be related to Transition Year provision and uptake are provided in Table 6.1. This allows students' reported attitudes and feedback on their TY experience to be interpreted in the appropriate school context.

School ID	Туре	Gender	DEIS	Fee-paying	Compulsory TY
12	Comm./Comp.	Mixed	Non-DEIS	No	Optional
14	Secondary	Boys	Non-DEIS	No	Compulsory
15	Secondary	Boys	Non-DEIS	No	Compulsory
16	Secondary	Boys	Non-DEIS	No	Optional
18	Secondary	Boys	Non-DEIS	Fee-paying	Compulsory
20	Secondary	Girls	Non-DEIS	No	Compulsory
22	Secondary	Girls	Non-DEIS	No	Optional
25	Secondary	Girls	Non-DEIS	No	Compulsory
26	Secondary	Girls	Non-DEIS	No	Optional
27	Secondary	Mixed	Non-DEIS	Fee-paying	Compulsory
28	Secondary	Mixed	Non-DEIS	Fee-paying	Compulsory
30	Secondary	Mixed	Non-DEIS	No	Optional
31	Vocational	Mixed	Non-DEIS	No	Optional
32	Vocational	Mixed	Non-DEIS	No	Optional
33	Vocational	Mixed	Non-DEIS	No	Optional
35	Comm./Comp.	Mixed	DEIS	No	Optional
36	Secondary	Boys	DEIS	No	Optional
37	Vocational	Mixed	DEIS	No	Optional
38	Vocational	Mixed	DEIS	No	Optional
40	Secondary	Mixed	Non-DEIS	Fee-paying	Optional

Table 6.1: Summary characteristics of participating schools

A thematic content analysis was undertaken in order to identify recurring features in students' observations (Braun & Clarke, 2006, 2013; Darmody & Byrne, 2006; Hsieh & Shannon, 2005). Content analysis can be defined as "any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings" leading to the identification of patterns or themes (Patton, 2002, p. 453). In this study, individual codes relating to specific aspects of students' experience were derived inductively – in a bottom-up manner – from the data. These codes were subsequently used to identify overarching or recurring themes, with the aim of reducing large amounts of information into fewer, more meaningful categories. This approach is known as conventional content analysis, contrasting with directed content analysis (which uses pre-determined codes) or summative content analysis (which focuses on counting and comparing the frequency of keywords) (Hsieh & Shannon, 2005). By developing codes and identifying themes in students' constructed responses from the ground up, rather than imposing pre-defined categories based on analysis of the quantitative data, the qualitative

data can be used effectively to explore nuances and subtleties that may be beyond the reach of the main quantitative outcome measures (Sandelowski, Voils & Knafl, 2009). All thematic coding was performed and managed using the NVivo 10 software package (QSR International, 2012).

The juxtaposition of quantitative construct measurements (Chapter 5) with students' subjective views of the programme (this chapter) is an example of what Greene, Caracelli and (1989)call the complementarity function of mixed-methods Graham research. Complementarity describes research studies where "qualitative and quantitative methods are used to measure overlapping but also different facets of a phenomenon, yielding an enriched, elaborated understanding of that phenomenon" (Greene et al., 1989, p. 258). They also note that "interpretability is best enhanced when the methods are implemented simultaneously and interactively within a single study" (pp. 266-267), as is the case here, with responses to all measures provided contemporaneously by the same groups of students. Kelle (2006) and Symonds and Gorard (2010) make similar points by emphasising the potential for each approach to validate the other. For example, qualitative analysis can point to unmeasured variables that have been omitted from quantitative models. The use of both approaches can also mitigate the risk of making inappropriate over-generalisations through relying too heavily on only one perspective of the data.

The main findings are presented in the following sections, which are ordered chronologically (Sandelowski, 1998; Wolcott, 1994). They focus, in turn, on the anticipated experience of Third Year students, followed by students experiencing Transition Year at the time of the survey and, finally, on the retrospective and distal experience of students in Fifth Year and Sixth Year.

6.2 'Before TY': views of Third Year students

At the time of the first wave of the survey (March/April 2011), some Third Year students already knew whether or not they would take part in Transition Year in the following school year. Other students had not yet decided or were waiting for the school to let them know. Regardless, all participants were asked briefly about their opinion of the TY programme in their school (Section 6.2.1) and were further prompted with open-ended questions regarding their views of the ideal components of a Transition Year (Section 6.2.2), whether or not it is a good experience generally (Section 6.2.3), and their reasons for taking part, or not taking part, in Transition Year the following year (Section 6.2.4).

6.2.1 Variation in beliefs about Transition Year

A large majority of Third Year students – more than four-fifths (82%) – reported that they expected that the TY programme in their own school would be a good experience (Table 6.2). Another 10% of students believed that Transition Year could be a positive experience generally, but had doubts about the quality of the programme in their school. Only 8% of students reported a negative view of the programme as a whole. As shown in Chapter 4, these perceptions, formed before and throughout Third Year, are strongly linked to subsequent participation in the programme.

Although these figures present a broadly positive picture of expectations for TY, significant variation between schools was evident. For example, School 31 had a particularly high percentage of students who believe Transition Year to be a good experience in other schools but not their own (46%), almost matching the percentage who expect it to be good in their school (50%). Conversely, four schools (School 16, School 18, School 22 and School 37) had extremely high levels of student endorsement for their TY programme. Endorsement for their own school's programme in these schools ranged from 94% to 96%, with only 1-2% expecting TY to be better in other schools.

In four of the twenty schools (School 14, School 35, School 36 and School 38), a notable minority of Third Year students (between 19% and 28%) endorsed the view that TY was not a good experience in general. Three of these schools, containing the three highest proportions of students with this opinion (School 35, School 36 and School 38), are categorised as disadvantaged schools that receive extra supports under SSP/DEIS. By contrast, students from the fourth SSP/DEIS school in the study (School 37) reported overwhelmingly positive views, with 95% of students believing it to be a good experience.

From what you've heard, do you think TY is a good experience?	you think TY is a good in my school scl		No, not a good experience		
School 12	89.6	5.2	5.2		
School 14	61.3	19.4	19.4		
School 15	83.3	15.3	1.4		
School 16	93.5	1.1	5.4		
School 18	95.3	3.3	1.3		
School 20	80.0	16.0	4.0		
School 22	96.3	1.9	1.9		
School 25	82.3	11.5	6.2		
School 26	87.0	7.3	5.7		
School 27	60.6	27.3	12.1		
School 28	71.9	18.8	9.4		
School 30	80.8	9.0	10.3		
School 31	50.0	45.8	4.2		
School 32	85.2	9.8	4.9		
School 33	84.2	6.9	8.9		
School 35	60.4	13.9	27.5		
School 36	59.5	18.9	21.6		
School 37	95.5	2.3	2.3		
School 38	44.4	27.8	27.8		
School 40	80.2	16.8	3.1		
Overall	81.9	10.5	7.6		

Table 6.2: Third Year students' perceptions of the TY programme, %, overall and by school (N = 1563)

Examining students' beliefs in terms of the characteristics of their schools shows that responses tended to be broadly similar across the various categories (Table 6.3). Nonetheless, some patterns are suggested by the data. The clearest of these patterns is the tendency, just noted, for students in designated disadvantaged schools to report more negative views of Transition Year than their peers in non-DEIS schools. About four times as many students in DEIS schools said that TY was not a good experience in general (21% vs 5%), and they were also more likely to believe that TY might be a good experience in some circumstances, but not in their particular school (15% vs 10%). Students in mixed schools were somewhat less positive about TY than students in single-sex schools, while students attending voluntary secondary schools were slightly more likely than those in other school types to endorse positive views of the TY programme in their school.

From what you've heard, do you think TY is a good experience?	Yes, it's good in my school	Maybe, in some schools but not mine	No, not a good experience
Compulsory TY	82.9	11.8	5.3
Optional TY	81.5	9.9	8.6
DEIS	64.7	14.7	20.6
Non-DEIS	84.9	9.8	5.4
Gender – mixed	76.7	13.3	10.0
Gender – boys	86.4	7.8	5.7
Gender – girls	87.8	7.6	4.6
Type – comm./comp.	74.6	9.6	15.7
Type – secondary	84.4	9.9	5.7
Type – vocational	77.8	13.2	9.0
Overall	81.9	10.5	7.6

Table 6.3: Third Year students' perceptions of the TY programme, %, by school characteristics

6.2.2 Ideally, what would you do in a Transition Year?

This section differs from the previous in that it moves away from purely quantitative indicators of the Transition Year experience. Instead, students' own self-generated comments on what they would like to see in an ideal Transition Year are examined. Recurring categories of suggested TY features were identified inductively from repeated readings of students' responses, without specifying a pre-determined structure in advance (Sandelowski et al., 2009).

Responses to the first question, asking for students' thoughts on the ideal TY experience, tended to fall into one or several of 10 main categories:

i) Having a break, or a chance to relax, between the stresses of Third Year and beginning the senior cycle. This was put forward as a major part of the appeal of TY by a majority of students, and was more commonly cited by boys than by girls.

"I would like a year where there is no pressure or stress. A year to have a break, relax and have fun. I would like to get involved in activities which would benefit the local community" (School 16, male)

ii) Using the year to help prepare for the LCE. In some cases, a direct route to the LCE was suggested by beginning study early as a means of spreading the load across three years. More commonly, students referred to the idea of having breathing space to consider their options in light of their JCE results and their experience with TY subjects and work experience, with the goal thereafter of settling on or amending LCE subject choices.

"Get more experience and familiarise myself with the Leaving Cert to get a better chance to pass it" (School 36, male)

iii) The chance to learn a skill (common choices specifically mentioned included computer/software coding, learning to drive a car, or first aid) or to take part in a particular TY activity or module (e.g., plays and musicals, debating, outdoor activities, mini-companies, or community and charity work) that the student had not had the chance to experience before and would not experience in other school years.

"Everything – take up lots of new sports/clubs, learn boxing/flute, learn to drive, take on 2 new subjects, run a marathon, go abroad, do work experience, do a Gaisce, etc.!" (School 22, female)

iv) Trips within Ireland (e.g., to outdoor centres or museums) and travel abroad (on student exchanges, with charities, or on school trips). Many specific suggestions were made but these tended to be clustered within schools, clearly implying regularly-organised destinations for successive cohorts of TY students within particular schools. The appeal of the trips included the intrinsic value of seeing a new place or taking part in a new activity, interacting with peers and teachers in a new setting, and simply for the chance to try something new outside the classroom and normal school timetable.

"I would like to get new experiences. Less schoolwork and more trips and learning about things outside of school" (School 37, female)

 v) Learning a language, either by improving skill in an existing language (e.g., French, Spanish, German) by means of an exchange or school trip abroad, or by trying a new language (e.g., Italian, Japanese). This overlaps with each of the previous three themes, but was common enough to merit its own category.

"Learn another language, e.g., Japanese, because it would come in useful when applying for a job" (School 22, female)

vi) The chance to practise and devote more time to improving existing skills and extracurricular activities. For many students, these were specific (named) individual and team sports, and musical instruments.

> "Learn and improve on my skills such as piano and guitar. Play and improve on sports such as golf and football. Learn how to drive a car. Get better at French and Irish" (School 12, female)

vii) Beyond those students who wanted to devote more time to an existing sporting activity, one of the more common ideas was that many students were looking forward to having more time for P.E. in school, wanted to try new physical or sporting activities (e.g., kickboxing, canoeing, horse-riding), or specifically mentioned wanting to get fitter or improve their general fitness without naming a sport. This ambition tended to be expressed more frequently by male students.

"More PE classes as this year, the school gave us no P.E." (School 15, male)

viii)Making new friends and getting to know existing classmates better through different activities in school, extra-curricular activities, and trips outside school. This theme was more commonly expressed by female students than by males.

"Go on a good few day trips so I can get to know what my friends are like outside school" (School 37, male)

ix) Consciously taking the extra year to mature as a person. For some students this related to developing social skills and working as part of a team. For others, it was more about developing self-confidence (e.g., by taking part in a school musical or public debate). In other cases, students were interested in developing particular 'life skills' – for example, public speaking, sociocultural awareness, or decision-making – or in 'maturing' in a very general sense.

"I would like to prepare for leaving school because this is really important. I would like to find out what career I'll take and also gain skills that will help me for leaving school, eg. Public speaking, etc." (School 33, male)

The final broad theme that recurred frequently related to the work experience component of the programme:

x) Work experience was commonly cited as something that students were looking forward to. This was often in quite general terms because, as many students were quick to point out, they did not know what to expect at all, and the main appeal was in seeing what a workplace would be like. There were some notable exceptions from students who had a specific work placement in mind that they wanted to experience because it was what they wanted to do, or something they were considering, after leaving school, and Transition Year presented an opportunity to see how they would get on in that environment. Other students struck a middle ground between these two extremes by intending to use the work experience placements to help give them an idea of what sort of choices they might want to make in future and to learn some work-related skills.

"I would like to go to the army barracks because going to the army is my dream job and I want to know what it's like before I go" (School 37, male)

6.2.3 Do you think Transition Year is a good experience?

Responses to this question were notable for several repeating themes, including some that appeared more frequently in certain schools than others. The most prominent feature to come from the transcriptions, across all schools, was the importance of word-of-mouth in building perceptions of a school's Transition Year programme amongst the student body.

The reports of older siblings and friends who had experienced the programme were central to fostering positive or negative impressions among Third Year students. By contrast, teachers' opinions on the programme were rarely mentioned, and only then if they conflicted with peer reports:

"Most boys in my school leave transition year saying that it was the best experience of their lives" (School 16, male)

'It is well run in our school – everyone that does it recommends it. I think it's a year to find out a lot about yourself and become more mature' (School 22, female)

"All my friends are in Transition Year and they all say it's a waste of time but my teachers are saying it is a good year and are advising that we do it" (School 36, male)

"All my friends say do it or you will regret it" (School 37, female)

In cases where conflicting advice was being received from peers and teachers, students usually reported still being unsure whether or not they wanted to take part in TY even at the time of this survey, near the end of Third Year. A more detailed ambiguity regarding perceptions of TY was expressed by some students who recognised that there might be positive aspects to the year, but preferred to skip it nonetheless in favour of beginning the senior cycle directly:

'I think that it is a good experience as you mature and get many different qualifications [but] I do not want an unnecessary extra year in school'' (School 12, male)

These nuanced views appeared in a number of schools but were particularly apparent in three: School 33, School 35, and School 36. School 33 is a non-DEIS vocational school, while both School 35 and School 36 are designated as disadvantaged by receiving supports under the DEIS programme. For many students, this preference – moving directly to Fifth Year – was linked to concerns about losing their academic stride by losing the habit of disciplined study that had been developed during the year leading up to the Junior Certificate, with knock-on implications for performance in the Leaving Certificate examinations. Such concerns are well-documented (Smyth et al., 2004) and something that TY coordinators are generally aware of, but they appeared again amongst this cohort:

"Maybe it's an ok experience, but it is also a waste. It takes you out of the habit of learning/studying & when you come back into 5th year, you are disoriented" (School 33, female)

"People say it's a doss and then in 4th and 5th year [5th and 6th year] they can't get back into studying again and end up doing not well in the Leaving Cert" (School 35, male)

The Department of Education and Skills' guidelines are clear that the Transition Year programme is not intended to form part of a three-year examination cycle. However, "while not absolutely excluding Leaving Certificate material", it may be designed "with a view to

augmenting the Leaving Certificate experience [and] laying a solid foundation for Leaving Certificate studies" (Dept. of Education, 1993, p. 2). The expectations of Third Year students suggested that some schools take advantage of this licence by attempting to strike a balance between integrating core Leaving Certificate material into the TY programme, thereby consolidating learning in a small number of key subjects, while simultaneously offering a broader range of optional subject tasters:

"From what I hear I think that TY is a good year to learn new skills and catch up on work in core subjects, and it's good to have a break after the Junior Cert" (School 12, female)

"In TY in our school the students still learn the core subjects, but get to sample other subjects like music [as well]" (School 12, female)

"Everybody that has done Transition Year in my school has said it's been good experience and it gives you a taste of all the Leaving Cert subjects" (School 36, male)

The difficulties faced by teachers in adequately striking a balance in this regard, for their own students, was highlighted by the fact that a minority of students also made the opposite criticism – feeling that their Transition Year was overly-focused on academic learning and not sufficiently different from the rest of their everyday school experience. In such cases, where the balance of traditional schoolwork compared to out-of-school activities and non-traditional modules (e.g., first aid) was skewed, the purpose of Transition Year was seen as being defeated:

> "Tve heard from other students that it's like doing 3rd or 5th year. Some schools don't do much activities and get a head start for the Leaving Cert. I understand why, but we should have more freedom and learning in a fun way about the world" (School 31, female)

Beyond these purely academic concerns, another reason for the apparent contradiction expressed by some students – recognising the benefits of TY in terms of providing space to become more mature, gain confidence, and learn life skills, but nonetheless choosing not to take part in it – may be the 'density' of activities during the year. Students frequently chose to praise their school's TY programme with references to how busy the current Transition Year students were being kept, or, conversely, criticised their school's programme by pointing to a lack of activity:

"They take part in activities and never seem to be bored" (School 12, female)

'It is well structured and it isn't a boring year, there are many trips and lots of things to do" (School 18, male)

"Yes – it is well done and organised. Do good activities. Go to good careers forums. Have good language and sports events/courses. Good travelling options/opportunities. Take part in so much, a variety" (School 22, female)

"In some schools but not in mine – it's very slack!" (School 35, male)

"People in TY this year don't seem to be doing a lot and mostly seem to be just sitting about the school" (School 35, female)

This comparison – between being kept busy and taking part in a variety of activities, versus not doing many activities – was key to Third Year students' impressions of the TY experience. It featured, directly or indirectly, at the heart of any unfavourable comparisons that were drawn between the TY programme in the student's own school and what they had heard about from students in other schools. Criticism of this sort was particularly noticeable from students in School 15 (a boys secondary school with a compulsory TY) and School 31 (a mixed vocational school with an optional TY). A number of students in each reported the impression that their school's TY was disorganised or uninteresting, particularly when compared to what they had heard about the activities that Transition Year students took part in other schools:

From talking to students currently in TY it is a great experience but not so much in my school. Apparently the activities are messy and unorganised as well as being infrequent" (School 15, male)

"Because most schools go on trips and have a good time – in mine all you do is more work than [in] 3rd year" (School 31, male)

"I get a lot of stories from my friends in other schools telling me they're going on longdistance trips and do a lot of fun activities. People in 4th year at the moment [in my school] have told me that you don't do much work and just sit there" (School 31, male)

Overall, it is clear that feedback from older students and siblings was a key factor in Third Year students' decision-making process. Where students had a choice with regard to participation in TY, responses suggest that it was given a lot of thought as students weighed up the pros and cons of the extra year in school while trying to disentangle the potentiallyconflicting advice they may have received from peers, parents, and teachers. A majority of students seemed to look forward to the possibilities and unusual nature of the year, but in some cases this was counteracted by seemingly low expectations where they feared that the programme, as implemented in their school, would not live up to its reputation. This ambiguity is explored further in the next section.

6.2.4 Why will you [not] take part in Transition Year next year?

A prompt that accompanied this question asked students to declare their intentions with regard to TY participation in the following school year. Overall, just over three-quarters of

the cohort (76%) said that they did intend to enter TY, compared to one-fifth (19%) saying that they would not and 4% who were still unsure at that point. 40

This question is not fully applicable in schools where Transition Year participation is compulsory, but it can still provide insight into students' thoughts about the value of the mandatory programme. For example, a lot of students in School 18, in particular, answered the question by saying that they have to do TY but would want to do it anyway. In other schools, the lack of an option means that students who felt strongly about continuing directly to the senior cycle may have had to seek an exemption or even move schools, leaving their peer group behind:

"In our school we are forced to do it but I agree it gives us more ideas about life after school" (School 18, male)

"It is done [compulsory] in my school but my mam wants me to change school to skip it" (School 20, female)

The main reasons why students knew that they wanted to experience Transition Year (a break from the high-pressure school environment, the chance to experience real workplaces, trips and travel, mental space and opportunities to mature and gain life skills, etc.) or knew that they wanted to skip it (not wanting to lose the habit of study, or not wanting to waste a year doing nothing or being bored) have been discussed in the previous two sections. Because of this, the focus in this section turns to the small proportion of students who expressed mixed views or were still undecided about Transition Year coming towards the end of Third Year.

Provision of a Transition Year programme (by schools) and uptake of the option (by students) are known to be lower in vocational schools than in other school types and in DEIS schools compared to non-DEIS schools (Clerkin, 2013). One reason for this is suggested by the finding from Section 6.2.3 that the most nuanced Third Year perceptions of TY here came from students attending a vocational school and from DEIS schools.⁴¹ While many students tended to come out quite strongly in favour of the programme or were definitely not interested in taking part, students with more nuanced perceptions were more likely to recognise the potential value of participation in an abstract sense or for other students, but to feel that it was better not to take part themselves or to still be weighing up

⁴⁰ This was previously reported in Chapter 4 (Table 4.4) separately for TY participants and non-participants.

⁴¹ For comparison, see also the percentages selecting "Maybe, in some schools but not in mine" in Table 6.3.

the pros and cons. A number of respondents – in both DEIS and non-DEIS schools – expressed views of this nature:

"Most Junior Certs do it, do a lot of activities, work, charity, different activities... [but] I would not study and [would] lose concentration and I would waste the year" (School 22, female)

"The school makes an effort to do many activities to make the year special [but I am] not particularly interested. Would like to move on to Leaving Cert instead" (School 33, female)

"Past pupils said it was a good experience and so did teachers [but] I think personally it is a waste of a year and subject choice suited me this year and might not have next year" (School 35, male)

"Yeah, it seems good enough in my school. Lots of activities. [But] I don't want to do an extra year – 5 [years] is enough" (School 35, female)

"I want to do it and I don't want to do it both for different reasons" (School 36, male)

These students were clearly aware of the options and had put some thought into the best course of action for themselves. The decision to skip TY was often linked to their preference of staying in the habit of studying or to keeping the remaining time until they could complete the Leaving Certificate to a minimum. Given the higher rates of disengagement and early school leaving among students from relatively disadvantaged backgrounds (Byrne & Smyth, 2010), the decision to skip TY could suggest a conscious determination on the part of these students to continue with mainstream education without disruption or distractions that might cause them to disengage from the regular school day. In essence, they may not have seen Transition Year as the most pragmatic or useful way to spend time when they could have been progressing towards terminal qualifications.

This perspective has been implicitly acknowledged by the school management in School 35, where the two senior cycle years (leading to examinations) appear to be known as Fourth Year and Fifth Year rather than Fifth Year and Sixth Year:

"Waste of year – people get bored of going into school and doing nothing. [It's] difficult to get back into [the] flow of school work in 4th year [Fifth Year]" (School 35, male)

This unusual terminology was used by several students in School 35. It suggests a structure where First Year to Fifth Year (Sixth Year) is regarded as the norm, with Transition Year presented more clearly than in most schools as a discrete experience separated from the 'mainstream' grade levels. Furthering this impression, School 35 was the only school where the phrase 'gap year' was used by students – a small number of whom presented their decision not to do Transition Year explicitly as a trade-off against their preference for a gap year after leaving school:

"No – I want to take a gap year after my Leaving Cert instead" (School 35, female)

"No – I feel that I'm at the right age now, and will be the right age when doing my LC. Also I feel that if I were to do TY I would probably not take a 'gap year' after the LC, as I am seriously considering it, for many reasons" (School 35, male)

School 35 provides a good example of the wider phenomenon of Third Year students reporting mixed perceptions of the Transition Year programme in their school. While some students had very poor impressions of the activity levels of TY students in their school (see example quotes in Section 6.2.3), others had heard very favourable comments:

"Most people who come out of TY say "it was the best year of my life, I want to do it again"" (School 35, female)

"I have heard a majority of past TY students telling me to do it and that it's well worth and you get closer to much more people" (School 35, male)

At first glance, these positive recommendations conflict strongly with the negative perceptions reported by other students. The fact that substantial proportions of the cohort reported both extremes – receiving exhortations to take part in TY and also to avoid it – serves to underline the difficulties for TY coordinators who are tasked with trying to design and run a programme that benefits all of their students in the most effective way. The uncertainty felt by Third Years at this juncture, when the main source of information is two completely contradictory sets of advice from older peers, was neatly expressed by one student:

"People seem to have a mixed impression of TY – people who do it say definitely do it and people who don't say definitely don't do it" (School 35, male)

In such cases, the deciding factor may be one or both of the only two themes that featured strongly (across all schools) in responses to the question heading this section but not to the previous questions. Where all else is equal, the final decision may be swayed either by students' desire to spend an extra year in school if they feel that they would be too young leaving school otherwise, or, by taking whichever option would keep them with the majority of their existing friends:

> "I will take part because if I don't I will only just have turned 17 and that is quite young. And TY will give me an idea of what career I want" (School 35, female)

> "Because I want to finish my Leaving Cert with my friends and go to college with them instead of staying an extra year in secondary school" (School 35, male)

"Because it sounds fun and I would really like a break from my exams and because most of my friends are going into transition year" (School 36, male)

Indirect peer influence of this nature featured as a factor for many students here. One implication for school staff is to be aware that, if certain students are identified as good candidates for TY and encouraged to take part while other students are advised to continue directly to senior cycle, knock-on effects throughout their friendship groups are likely. Beyond that, these factors (students' age and peer influence) are out of the hands of TY coordinators. However, they should be acknowledged and discussed in any communications or informational events that are intended to help students make a decision on whether or not Transition Year is right for them.

6.3 'During TY': views of Transition Year students

As well as the Likert-scale items reported next, Transition Year students were asked three open-ended questions: one about their experience of the year, one about whether they would recommend the year to future cohorts of Third Year students, and one about what could have been done to improve their year. Taken together, the feedback and comments allow us to begin to build up a picture of the TY experience nationally and within particular schools.

6.3.1 Variation in the Transition Year experience

Transition Year students were asked a broader range of questions than Third Year students based on their experiences up to the time of the survey, near the end of the school year. As shown (Table 6.4), the general impression given is that the Transition Year experience was a positive one for many, but not all, students. Four-fifths of TY students (79%) were at least *satisfied* with their experience, with nearly one-third of the total (31%) being *very happy* with the year. A minority of students (6%) were *unhappy* or *very unhappy*, and a further 8% were *not satisfied* with their time in Transition Year.

Nearly three-quarters of students (74%) reported that their year had been an enjoyable one. On the other hand, respondents were somewhat less convinced about the utility of the year – a smaller majority (58%) considered it to have been a useful experience for them.⁴² Conversely, about one-tenth of students (11%) did not enjoy the year, and one-quarter (26%) did not consider their time in Transition Year to have been useful.

⁴² Judgements as to what qualifies as 'useful' were not defined in the question and so were left to students' own interpretation. The self-generated comments described in Section 6.3.2 deal with this topic in more detail.

		%
Overall, were you happy with your TY experience?	Very unhappy	2.8
	Unhappy	2.9
	Not satisfied	8.3
	Not sure	6.8
	Satisfied	20.8
	Нарру	27.7
	Very happy	30.6
TY is an enjoyable year	Not very enjoyable	3.7
	Rarely enjoyable	7.7
	Ok	14.5
	Somewhat enjoyable	40.4
	Very enjoyable	33.6
TY is a useful year (e.g., have you learned much?)	Not very useful	10.3
	Rarely useful	15.6
	Ok	15.8
	Somewhat useful	34.1
	Very useful	24.2
Use your TV experience been what you expected?*	Yes	62.7
Has your TY experience been what you expected?*	No	37.3
Do you think your school gave you enough information	Yes	76.4
about what TY would be like?*	No	23.6
Would you recommend TY in your school to 3 rd year	Yes	80.6
students?	No	19.4
How do you feel about going towards the Leaving Cert	I feel less well prepared	22.2
next year, compared to how you think you would have	I feel the same	29.7
felt if you have not done Transition Year first?*	I feel better prepared now	48.1

Table 6.4: Transition Year students' perceptions of the TY programme (N = 2297)

*Item administered in Wave 2 only.

Two questions dealt with the issue of 'selling' Transition Year to Third Year students (and their parents) and the information that is provided by schools in advance of participation. The first question asked, in a general sense, whether students' experience of TY matched what had been expected. Expectations could be taken to incorporate official information, such as brochures and talks provided by the school, as well as more informal impressions of the programme influenced by peers, parents, siblings, and school staff. More than one-third of students (37%) said that Transition Year had not been as they expected. Bearing in mind the minority of students who take part in TY with little prior enthusiasm (see Table 4.4), it should be noted that 'not meeting expectations' could be indicative of a positive or a negative experience. In an extreme case, 92% of students in School 31 said that TY was not what they had envisaged (Table 6.5). The next-highest percentage in any individual school was lower, at 59%, but still higher than might be anticipated.

The second question asked more directly whether the school had given the students sufficient information about what their Transition Year programme would actually be like. Overall, 76% of students agreed that they had received enough information. Again,

substantial variation between schools was clear. In individual schools, student satisfaction with the level of information provided before participating ranged from lows of 31% (School 31) and 50% (School 36) to highs of more than 91% (School 26, School 30, and School 37).

	Was TY as y	Was TY as you expected?		Did your school provide enough information?		
	Yes	No	Yes	No		
School 12	52.8	47.2	76.4	23.6		
School 14	41.2	58.8	67.6	32.4		
School 15	66.2	33.8	59.2	40.8		
School 16	70.2	29.8	72.6	27.4		
School 18	69.3	30.7	83.9	16.1		
School 20	43.9	56.1	60.7	39.3		
School 22	65.1	34.9	80.7	19.3		
School 25	56.3	43.7	74.7	25.3		
School 26	76.5	23.5	92.9	7.1		
School 27	51.0	49.0	66.7	33.3		
School 28	59.4	40.6	75.0	25.0		
School 30	73.8	26.2	92.3	7.7		
School 31	7.7	92.3	30.8	69.2		
School 32	69.7	30.3	87.9	12.1		
School 33	52.2	47.8	73.9	26.1		
School 35	71.7	28.3	73.9	26.1		
School 36	54.5	45.5	50.0	50.0		
School 37	69.6	30.4	91.3	8.7		
School 38*	-	-	-	-		
School 40	76.8	23.2	84.1	15.9		
Overall	62.7	37.3	76.4	23.6		

Table 6.5: TY students' views on the information received prior to taking part, %, by school

*These items were administered in Wave 2 only and Transition Year was provided in School 38 in Wave 1 only. Therefore, there are no responses from School 38 for this question.

Four out of five TY students (81%) said that they would recommend Transition Year to Third Year students in their school. As with the Third Year views reported in Table 6.2 – and, presumably, a contributing factor to those views – variation between schools was clear (Table 6.6). In some schools the recommendation was almost evenly-split: the percentage of participants who would recommend the programme to others in their school went as low as 53% in School 14, which has a compulsory TY, and 55% in School 31, which has an optional programme. On the other hand, five schools (School 22, School 26, School 30, School 32 and School 38) had very high levels of satisfaction, with more than 90% of students recommending participation.

Finally, at the end of their Transition Year, students were asked whether they felt any more or less prepared to enter the senior examination cycle than they would have if they had not taken part in TY. Almost half of students (48%) reported feeling better-prepared for the

Leaving Certificate, while about one-fifth (22%) felt less well prepared. Opinions varied widely between schools (Table 6.6). Depending on which group of students was asked, about 20%-73% of students per school reported feeling better-prepared for senior cycle, and 3%-44% reported feeling less well prepared.

Interestingly, in only one school did a majority of students report feeling about the same towards senior cycle as they would have felt without Transition Year (62%). This was in School 31, where only 8% of students had had the TY experience that they expected (Table 6.5).

	Recom	mend TY?	Feel prepared for LCE?*		
	Vac	Ne	Less well	l feel	Better
	Yes	No	prepared	the same	prepared
School 12	82.6	17.4	32.6	22.5	44.9
School 14	52.8	47.2	32.4	47.1	20.6
School 15	77.4	22.6	44.3	35.7	20.0
School 16	88.7	11.3	14.3	32.1	53.6
School 18	83.3	16.7	24.4	31.4	44.2
School 20	75.7	24.3	31.6	33.3	35.1
School 22	91.3	8.7	15.7	21.7	62.7
School 25	73.8	26.2	28.7	41.4	29.9
School 26	92.4	7.6	17.6	17.6	64.7
School 27	77.3	22.7	14.9	31.9	53.2
School 28	69.9	30.1	31.2	34.4	34.4
School 30	90.0	10.0	3.2	42.9	54.0
School 31	54.8	45.2	15.4	61.5	23.1
School 32	93.1	6.9	6.1	21.2	72.7
School 33	80.7	19.3	23.2	18.8	58.0
School 35	78.8	21.2	15.6	26.7	57.8
School 36	61.5	38.5	31.8	18.2	50.0
School 37	81.0	19.0	26.1	34.8	39.1
School 38	92.9	7.1	-	-	-
School 40	81.7	18.3	13.4	24.4	62.2
Overall	80.6	19.4	22.2	29.7	48.1

Table 6.6: TY students' views towards TY and entering senior cycle, %, by school

*This item was administered in Wave 2 only and Transition Year was provided in School 38 in Wave 1 only. Therefore, there are no responses from School 38 for this question.

In terms of school characteristics, students' responses were broadly comparable across categories in most cases – for example, feedback was very similar in DEIS and non-DEIS schools. However, important differences in students' impressions of TY were apparent between schools where TY was offered on an optional basis and schools where participation was mandatory (Table 6.7).

		Compulsory (%)	Optional (%)
Overall, were you happy with your TY experience?	Very unhappy	4.3	1.9
	Unhappy	4.7	1.6
	Not satisfied	12.3	5.6
	Not sure	8.8	5.5
	Satisfied	23.0	19.3
	Нарру	26.8	28.4
	Very happy	20.0	37.8
TY is an enjoyable year	Not very enjoyable	6.3	1.9
	Rarely enjoyable	11.1	5.4
	Ok	19.0	11.5
	Somewhat enjoyable	41.9	39.4
	Very enjoyable	21.7	41.7
TY is a useful year (e.g., have you learned much?)	Not very useful	15.2	7.0
	Rarely useful	20.8	12.1
	Ok	17.1	15.0
	Somewhat useful	31.2	36.0
	Very useful	15.7	30.0
Would you recommend TY in your school to 3 rd	Yes	74.8	84.4
year students?	No	25.2	15.6
Has your TY experience been what you expected?*	Yes	57.4	65.9
	No	42.6	34.1
Do you think your school gave you enough	Yes	70.6	79.8
information about what TY would be like?*	No	29.4	20.2
How do you feel about going towards the Leaving	Less well prepared now	29.8	17.7
Cert next year, compared to how you think you	I feel the same	36.1	25.9
would have felt if you have not done TY first?*	Better prepared now	34.1	56.4

Table 6.7: Transition Year students'	perceptions of TY. %. by c	compulsory vs optional TY programmes

*Item administered in Wave 2 only.

Students who had been part of a compulsory Transition Year reported more negative views of the year than students in other schools who had opted into TY, consistently, for each of the questions asked. For example, only about half as many students in schools with compulsory TY were *very happy* with their experience of the programme (20% vs 38%), and twice as many reported feeling unsatisfied or unhappy (21% vs 9%). Similar patterns emerged when asked about their enjoyment of the year and how useful they found it to be. A higher proportion of students in compulsory TY programmes said that they would recommend against participation in TY to Third Year students (25% vs 16%). Finally, where TY was compulsory, more students reported feeling less well prepared to enter senior cycle (30% vs 18%) and fewer reported feeling better prepared (34% vs 56%), compared to their peers who were given the choice to participate.

6.3.2 Why did you [not] find TY enjoyable or useful?

Responses to this question can be broadly separated into two opposing categories: a small set of recurring negative aspects of the year, and a broader range of comments about positive aspects. The most common criticism of Transition Year was the feeling that the year had been a boring one or that classes had been aimless, with too much unstructured time. This was noted by at least one student in a number of schools, but was particularly common – and the single most frequent comment – in School 14, School 15, and School 31. A related complaint, most often articulated in School 31, was that too much time was being spent in class as opposed to getting out into the real world:

"Nothing to stimulate our minds and keep us interested" (School 14, male)

'I think that T.Y. is boring and that we don't go on enough trips or do enough enjoyable subjects'' (School 15, male)

"We are mostly in class and have not started on the 5th year course and it gets very boring. If we were able to do more practical work, I think it would be much better" (School 31, female)

At the root of these complaints is the sense of being underwhelmed by a Transition Year lacking in direction. These students feel they do not have enough interesting work to do in school and are also constricted by a dearth of TY activities outside the school building, and so feel as though they are left to drift. The responses of Third Year students (Section 6.2) make it clear that new experiences are the lifeblood of the Transition Year programme, with participants eager to get outside school for trips and activities and to learn new skills in class. These characteristics rank among the most fundamental attractions of the TY programme. Therefore, disappointment is inevitable if students form an expectation for certain activities or for some other special feature of TY – based on reports from older students or from the school's brochures and information nights – that does not correspond with their actual experience. In line with the comments above, students in School 15 and School 31 reported a particularly wide discrepancy between the expected TY experience and the actual TY experience (although the feeling was not unique to those schools):

> "It was good, but there weren't as many activities as let on in 3rd year" (School 15, male) "Transition Year is glamorised in 3rd year, in actuality it can be quite boring" (School 18, male)

> "We were told it wouldn't be a doss year but that is EXACTLY what it was. I wish we had participated in more activities that I could have remembered in the future" (School 31, male)

It is worth noting that this sense of disappointment was not restricted to students with particularly negative views of Transition Year. It featured even among some students who reported more general feelings of positivity towards the TY experience but felt let down that it wasn't everything it could have been. In some cases, the problem does not seem to be

with the TY experience in itself, but more with a lack of consistency or a loss of momentum throughout the year:

"I think it could be really good but it is let fall apart around half-way through the year and is a waste" (School 18, male)

"Good experience but lazy/boring at times. No goals" (School 30, male)

Finally, another variation on the theme of expectations not being met was articulated in School 16, where several students noted their impression that their teachers were overly (or even unnecessarily) strict with TY classes. This contrasts with the more common perception that teachers can be more approachable during Transition Year, and that students and teachers often develop better relationships in TY that continue through to the senior cycle. Undermining this perception may reduce the attraction of the programme, since a key selling point to Third Year students is that TY offers a different type of school experience and a more interactive way of working with teachers and peers. Contrast the views of students in School 16 on this point with those from students in other schools:

> "TY is just like any other year with a couple of trips thrown in. Teachers are even more strict because they want to emphasise that it is not a free year, which takes the whole point out of Transition Year" (School 16, male)

"Teachers seemed to be a lot stricter on minor things" (School 16, male)

"It's a good experience and you get to go on trips and you're trusted more in the school" (School 30, female)

"It helps to mature and the teachers treat you like an adult and they talk to you more" (School 38, female)

Although these reports highlight certain problems with the implementation of the programme in some cases, the greater majority of students do seem to come out of Transition Year with observations of a positive experience that is different from their everyday school life. This is reflected in the broad range of outcomes for which praise for the year was volunteered by participants in this study.

When asked why they enjoyed the year or found it to be useful to them, the most commonly-articulated reasons fell into six main categories: (a) that TY gave them breathing space and a chance to recover mentally following the Junior Certificate examinations; (b) that TY helped them to make decisions about their subject choices for the Leaving Certificate and/or their career after school; (c) that TY led to the acquisition of a range of new skills and a variety of novel experiences which broadened their view of the world; (d) that TY resulted in forming new friendships and strong bonds with peers; (e) that TY enabled them to mature, grow in confidence, become more independent, and so on; and, finally, (f) that TY

gave them an opportunity and the means to learn about the real world, life as an adult, and the world of employment. Some examples, for illustrative purposes, include:

- a) "It gives you the time needed to just relax and get yourself ready for a study-filled two years" (School 15, male)
- b) "I feel it is a good year because it matures you and lets you have a year to think about subjects for the LC and what you'd like to do after the LC" (School 38, female)
- c) "I am happy with my TY experience because we got the chance to participate in more practical work, for example, we set up a mini-company and that taught us skills that were very valuable such as good communication" (School 26, female)
- d) "It's helped me learn a lot about myself and the people in my year. I've also spoken to people I never would have talked to before" (School 26, female)
- e) "I am very happy with Transition Year. I feel that my social skills have definitely improved. I have gained new confidence in myself and feel capable of doing new things in Fifth Year" (School 22, female)
- f) 'I feel as though I have matured and become more responsible and organised. I have seen more of the world" (School 18, male)

The correspondence between Third Year students' suggestions of what they would hope to experience in a Transition Year (Section 6.2.2) and these TY students' reports of the actual main outcomes is clear – most of the key features that Third Year students hope to experience in TY are, indeed, part of the reality of their Transition Year. In one sense, this is not surprising, as the views of Third Year students are heavily influenced by the reports of older peers (current or former TY participants) who can tell them what to expect from the TY programme in their school. Assuming a certain level of year-to-year consistency in the content of the TY programme in any given school, under the same TY coordinator, such informed expectations stand a good chance of being realised. In another sense, the fact that a substantial minority of students are left disappointed by the content and atmosphere of TY in their school, as reported above, is a reminder that expectations are not always met. In this context, the successful delivery of a satisfactory programme to most students is noteworthy in itself. Where expectations are not met, it may be partially attributable to the make-up of the programme varying from year to year (for example, if an activity or trip provided for one cohort is not made available to the next cohort).

Taken as a whole, praise and positive judgements in students' feedback here tended to outweigh criticism in most schools. In some (including School 22, School 30, and School 38), the feedback was predominantly complimentary, and TY students were almost universally positive in School 26 and School 35. In the latter schools, some particularly

strong reactions were evident, with Transition Year credited with improving attitudes to school and acting as a catalyst for personal development:

"Because the year has enabled me to expand my views and look at different perspectives in life. I have become more confident around others and feel I have 'evolved' as a person. I have allowed myself to make new friends that I will have forever. I heart TY" (School 26, female)

"I have met a lot of new friends. I'm more confident in my abilities to make decisions. I have a greater understanding of Leaving Cert subjects. I have grown more mature and confident. It is the best year ever!" (School 26, female)

"Transition Year gave me the break from academia I needed to focus on personal and physical development. I am now a fit, happy person that has finally had the chance to step away from books and towards life-changing experiences. If I was in 5th year right now I would have no time for this development" (School 26, female)

"I'm happy with my Transition Year experience because it gave me the chance to think about what I want to do in life and just to see how fun school can be and TY gave me a better view of how school can be for me" (School 35, male)

The quotes that begin this section illustrate one version of TY – the version that is sometimes described as a 'doss year' or a waste of time. These quotes, on the other hand, articulate a handful of examples that show the transformative power of the Transition Year programme when it is delivered and engaged with to its fullest potential. Providing the latter experience, rather than the former, to as many students as possible could be a core part of any strategy aimed at supporting wellbeing and ensuring the entry of healthy, well-rounded adults into society.

6.3.3 Why would you [not] recommend TY to Third Year students?

As might be expected, TY students' reasoning for recommending for or against participation in Transition Year closely matched the reasons why they had a positive or negative experience during the year. Each of the themes discussed in the previous section featured here. However, there were a number of additional points that students were also keen to make.

The most serious warning against Transition Year reported by TY students was the feeling that taking part can make it harder to do well in Fifth Year than would otherwise have been the case. As noted in Section 6.2, this was one of the main reservations that Third Year students held when considering their participation in TY. The opinions of some TY students suggest that this fear is not without merit, for either or both of two reasons.

The most direct reason comes from TY students who talked about forgetting things that they knew at the end of Third Year. In this scenario, the year spent outside formal academic structures in Transition Year could be considered somewhat analogous to the summer months between other school years, which are sometimes associated with a relative decline in achievement test scores on returning to school (termed *summer learning loss*). This may be a particular concern for students from more disadvantaged backgrounds and lower-achieving students, who are most at risk of summer learning loss in normal circumstances (Alexander, Entwisle & Olson, 2007; Cooper, Nye, Charlton, Lindsay & Greathouse, 1996; Rambo-Hernandez & McCoach, 2015). More indirectly, some TY students also reported that the relative lack of schoolwork or high-stakes examinations can create a habit or attitude of 'doing nothing'. At the very least, the minimum consequence of this would be a certain level of culture shock on encountering the typical senior cycle workload while, if carried on a prolonged basis into Fifth Year and Sixth year, there is a possibility that the habit could prove detrimental to subsequent learning:

"It's a bit of a waste and will make it harder to go into 5^{th} year as it's easy to forget everything you learn in 3^{rd} year" (School 12, female)

"As a lot of the same it is boring and monotonous, there are no real exams and nothing to work towards. I myself feel at a loose end almost. Also, with the lack of homework and study, 5th year is sure to be difficult" (School 22, female)

"Waste of a year. Will find it hard to start studying again" (School 36, male)

Interestingly, a small number of students recommended that worried Third Years could turn this concern on its head by making the most of having an additional year in school in order to consolidate or continue with their studies. For example, the following students (from a designated disadvantaged boys school) suggested that they felt as though their time in TY was beneficial for their preparation for the senior cycle beyond simply informing their subject choices:

"Yes – if they are hard-working they would have the same idea as well, having an extra year to study" (School 36, male)

"Because it gives you that year to mature and find out that the Leaving Cert is much harder than the Junior Cert. It gets you out of this "it's only the Junior Cert' attitude so you don't go into Leaving Cert doing nothing" (School 36, male)

It was not always clear whether such additional study was part of the school's official TY programme or simply a private determination by the student. However, it does point to the potential supporting function of Transition Year with regard to traditional subjects, particularly for schools with high concentrations of disadvantaged students, should schools choose to emphasise this approach. At the same time, it remains the case that TY is not intended to be used as the beginning of a three-year examination cycle (Dept. of Education, 1993). Retaining a serious concentration on traditional examination subjects without merely

repeating junior cycle material or getting a head start on Leaving Certificate material – while also maintaining the 'outside the mainstream' atmosphere and alternative teaching methods of the intended TY – requires substantial thought and creativity on the part of the teachers involved.

Beyond this main reservation, most TY students were happy to recommend Transition Year to their younger peers (as shown in Table 6.4) for the reasons described previously – greater maturity, a chance to think about subject choices and career options, new friendships, new experiences, and so on:

"Yes – because you will not get another chance to try out different things and discover who you are" (School 18, male)

"I think Transition Year is a great opportunity to learn lots of new things. You take part in subjects and activities that you may have never tried before. It is very beneficial to students who lack in confidence or are unsure of career paths etc." (School 35, female)

While many respondents accentuated either the positives of their experience (in recommending for) or the negatives (in recommending against), some students preferred to lay out the pros and cons of Transition Year, as they saw it, before coming to a final judgement of the programme on balance. For example, some students admitted to not particularly enjoying the year but nonetheless, on reflection, finding it a worthwhile experience:

"Although I did not enjoy it that much, I have matured a lot as a person and without TY I would not have been ready for the pressure of the Leaving Cert" (School 12, female)

The other recurring pattern of response to this question came from students who declined to give a definitive recommendation either way. Almost invariably, the reason given was that whether or not a student should take part in Transition Year depends on the student themselves – what they would want from the year and how they would intend to behave. These responses could be considered a qualified recommendation of Transition Year, as they tended to suggest that the programme would be beneficial if students were prepared to take full advantage of it. In some cases, this meant taking advantage of the various opportunities offered by the school; in others, this meant having the initiative to create one's own opportunities using the freedom and additional free time that come with participation:

"If you intend to get involved with what goes on, it is a great year, but only do it if you will involve yourself. You get out of it what you put into it" (School 12, female)

"Only if they have the will power and initiative to do stuff without people having to tell them, otherwise they will be bored all the time!" (School 15, male)

"If you really go for everything and get very involved it can be a worthwhile experience – there are lots of things that can be tried that you won't get the chance to do in more academic years" (School 18, male)

The final question asked of TY students delves deeper into the reservations expressed above by asking directly what would have given them a better TY experience.

6.3.4 What else would have been helpful for your TY?

One notable feature of this section is that it generated far fewer responses than the others; three-quarters of students left this question blank after answering the first two questions. This might suggest that students with frustrations felt that they had already expressed them in response to the previous questions and felt no need to reinforce those criticisms. It might also be indicative of the broad satisfaction with Transition Year that is expressed by the majority of students – given a prompt to articulate problems in a different way or to raise new issues that weren't covered by the previous questions, three out of four students declined to comment.

From the students who did provide ideas, two main issues emerged as popular suggestions for improving TY for future cohorts. The first is that, although some information may already be provided in advance, students often wanted more concrete details about what happens on a day-to-day basis in Transition Year. This included clarifying more precisely what differences students should expect to see between the Third Year classrooms that they are used to and the TY classrooms that they will be forming – for example, in terms of the teaching methods, level of student autonomy, or subject matter. It also referred to the desire to know before entering (or choosing) Transition Year the specific activities and trips that were likely to be available, as well as any major additional expenses:

"What class would be like and what we would spend our time doing outside class" (School 12, female)

"We weren't told the exact subjects we could be doing until we started Transition Year" (School 15, male)

"More in-depth explanation rather than just telling us we will be going on trips and work experience" (School 16, male)

One obvious barrier to giving this level of detail is that it may not be possible for TY coordinators to confirm to Third Year students what activities outside the school will be available a year, or even several months, later. However, activities within the school are often maintained or adapted from year to year. Information nights, together with printed informational brochures about the programme, are valuable in beginning to paint a picture of the programme for parents and students. Descriptions of classroom activities and other

specific information from current Transition Year students are likely to be of interest as part of this process, given that the views of older students play such an important role in Third Years students' decision-making (Section 6.2):

"They had a T.Y. information night which really helped me and talking to other T.Y. students, they recommended it" (School 12, male)

The second issue arising was that students wanted not just *more* information that filled in the details of what to expect from Transition Year, but also *better* information that could be relied upon to represent the reality of the experience. This reflected the comments of a number of students who reported that the programme had been oversold to them – for example, that they were told they would be doing things that never actually happened, or that they felt led to expect that activities would be better than they were. The criticism centres on the accuracy of the information given to Third Year students:

"I think they made it sound better than it was" (School 12, female)

"It would have been useful to know not everyone could participate in certain events because of the large number of people doing TY" (School 22, female)

"They weren't right about the COST" (School 26, female)

"They showed them going on loads of trips but never showed how boring it actually was" (School 32, male)

Comments such as these appeared in several schools, and were particularly common in School 15. This corresponds to earlier feedback, reported above, about feelings of boredom in class and more general disappointment that the year hadn't lived up to its billing. In such instances the problem is not necessarily that students did not know what to expect from TY, but that the view they had at the beginning of the programme did not match their subsequent experience. This mismatch was one of the most common sources of frustration with the year.

Explicitly acknowledging the 'downtime' that can be a feature of TY classes – or, if possible, reducing the extent of such downtime – could go some way towards ameliorating such complaints. As well as ensuring that Third Years, used to having a strictly-structured timetable, are made to recognise in advance that TY students sometimes report feeling at a loose end, it could be framed as a (supervised) challenge to students: *the school will prepare a TY programme for you, but if you feel that you do not have enough to do, take it as an opportunity to seize the initiative*.

6.4 'After TY': views of Fifth Year (and Sixth Year) students

The final group of students asked for their views were Fifth Year and Sixth Year students, who can look back on Transition Year at one year's or two years' remove, having fully reintegrated into more traditional classes. They may be able to make observations, in retrospect, that are not apparent to students who are more closely involved with the programme.

Feedback on Transition Year outcomes from the Likert-scale items are shown for both Fifth Year and Sixth Year students in Section 6.4.1. With regard to the open-ended questions, only the responses of Fifth Year students were transcribed for the subsequent sections (6.4.2-6.4.5) due to time and space constraints, although feedback from Sixth Year students may be expected to be broadly similar.

Fifth Year students who had previously taken part in TY were asked three questions: the best thing about the year, the worst thing about the year, and whether or not they would recommend TY to Third Year students. Students who moved directly from Third Year to Fifth Year, opting to skip Transition Year, were asked one alternative question: if there were any parts of the programme they would have liked to have had the opportunity to experience.

6.4.1 Variation in the Transition Year experience

Fifth and Sixth Year students who had previously taken part in TY were first asked to respond to two main statements: whether they were happy with their TY experience and whether they would recommend the year. Sixth Year students tended to express slightly less positive views of TY than Fifth Year students (Table 6.8).

Overall, both year groups remained *at least satisfied* with the experience (78% of Fifth Years and 69% of Sixth Years), although small minorities in both grades were *very unhappy* with Transition Year. The percentages of students who would recommend TY to Third Year students mirrored the reported satisfaction levels, with 78% of Fifth Years and 69% of Sixth Years saying that they would recommend TY.

Although not shown here, the pattern of responses in schools where TY was compulsory compared to where it was optional was similar to that reported for TY students in Table 6.7. Thus, even in senior grades, students tended to be less positive about the year and less likely to recommend it if they had taken part in a compulsory Transition Year.

		Fifth (%)	Sixth (%)
Were you happy with your TY experience?	Very unhappy	6.0	8.6
	Unhappy	4.2	5.7
	Not satisfied	8.7	10.4
	Not sure	3.5	5.8
	Satisfied	20.3	23.1
	Нарру	25.7	21.3
	Very happy	31.6	25.1
Mould use a second TV is used as less 2 rd uses at death?	Yes	78.0	69.4
Would you recommend TY in your school to 3 rd year students?	No	22.0	30.6

Table 6.8: Fifth Year (N = 3116) and Sixth Year (N = 933) students' perceptions of the TY programme

Ns refer to the number of students in each grade who had previously taken part in TY.

In addition to these general attitudes towards Transition Year, Fifth and Sixth Year students were asked to respond to a series of additional statements reflecting on some of the perceived outcomes of their participation in the programme. These statements were written to represent traditional perceptions and concerns relating to TY that are frequently expressed by parents, teachers, and students (Smyth et al., 2004; Jeffers, 2007a). The responses received from Fifth and Sixth Year students were broadly similar, so both grade levels have been combined here (Table 6.9) for clarity of presentation.

As shown, the strongest consensus was that Transition Year had led to the creation of strong friendships, with 87% of students considering this to be *a bit true* or *very true* (Table 6.9, where responses are ranked in descending order by the percentage of students selecting "Very True" in each case). Other positive perceptions of the programme that remained, a full one or two years after participation, included: feelings of increased confidence when trying new things (74%), learning how to work as part of a team (68%), making a better choice of subjects for the Leaving Certificate than would have been the case without the year out (65%), having a stronger idea about what the student wants to do after school (65%), and acquiring and implementing new organisational and time management skills (53%).

Together with these positive outcomes, some of the traditional concerns about Transition Year participation were also endorsed by the students. Many Fifth Year students reported that it took a long time after TY for them to settle back into a routine (67% saying that this was *a bit true* or *very true*). An analogous question for Sixth Year students ('I find it harder to settle to study') was at least *a bit true* for 57% of students. Forty-three per cent of students reported finding it harder to pay attention in class, and that it was harder to learn for the Leaving Certificate after TY.

Because I did Transition Year	Not at all true	Not very true	Not sure	A bit true	Very true
I have made good friends	2.7	3.6	6.3	33.0	54.3
It took me a long time to get into a routine in 5 th year ^a	8.1	19.0	6.0	29.8	37.0
I am more confident about trying new things	4.7	7.0	13.3	41.9	33.0
I made a better choice of Leaving Cert. subjects	7.2	12.4	15.6	36.4	28.4
I have learned a new skill outside school	9.3	14.8	14.8	33.2	28.0
I know more about what I want to do after school	8.1	14.8	12.5	37.1	27.4
I find it harder to settle to study $^{ m b}$	10.6	19.8	13.2	29.8	26.6
I learned how to work as part of a team	5.8	11.0	15.1	42.5	25.6
I feel like I've wasted a year	33.0	20.0	12.0	16.7	18.2
I think it's harder to learn for the Leaving Cert.	17.5	24.2	15.8	24.6	17.9
I am better at organising / managing things	11.9	18.7	16.2	37.1	16.0
I see more practical uses for things I learn in school	9.7	17.5	24.9	32.2	15.7
I find it harder to pay attention in class	15.2	26.5	15.9	28.6	13.8
It's hard to catch up to classmates who skipped TY ^{a c}	19.9	24.0	20.3	22.9	12.8
I am at a disadvantage to classmates who didn't do TY ^{b c}	39.4	25.7	21.5	11.2	2.2

Ns refer to the number of students in each grade who had previously taken part in TY. Items are ordered in descending order by the percentage selecting "Very True".

^a Item administered to Fifth Years only.

^b Item administered to Sixth Years only.

^c Analysis restricted to schools with optional TY only.

While the Transition Year experience seems to have had mixed outcomes for some students, it is apparent that many feel strongly about the benefits of the year. This is supported by an examination of the two items that received particularly high levels of disagreement. These were, firstly, the suggestion that TY could be considered a 'wasted year' (53% saying *not at all true* or *not very true*), and secondly, the question of whether Sixth Year respondents felt that taking part in TY had put them at a disadvantage to their peers who skipped the year (65% considered this to be untrue). Regarding the latter, it is worth noting that a similar statement presented to Fifth Year students (*it is hard to catch up to classmates who skipped TY*) received a somewhat higher level of endorsement, but that these perceptions of disadvantage compared to students who didn't do TY had largely dissipated by Sixth Year.

6.4.2 What were the best things about TY?

Broadly speaking, the most positive aspects of TY identified by Fifth Year students were similar to the reports of those students still in TY. Among the most common themes were getting to take a break from stressful exams; developing a newfound confidence, independence and maturity; having an extra year to think about the future; learning new skills, trying new subjects, and having new experiences; forming new friendships; and participating in work experience. However, having settled into senior cycle at the time of the survey (towards the end of Fifth Year) and being in a position to reflect on what TY meant

to them, the feedback from the older students elaborates on the lasting impact of these outcomes.

The potential value of the programme is put forward by the responses of Fifth Years who suggest that Transition Year represented, in retrospect, something of a transformative experience for them. Their time spent in the programme was described by these students as a turning point, with the positive outcomes attributed to participation going beyond narrowly-defined specifics (such as learning a new skill or the chance to relax) into wholesale changes of attitude towards school, towards life, and towards themselves:

"It was a once in a lifetime opportunity" (School 12, female)

"I became a lot more confident. I also learned a lot of things to help me, not only to get a job, but to enjoy life" (School 20, female)

"Doing things I had never done before – things like work experience and extra subjects helped me realise what I did/didn't want to do in college, and trips to different countries and places helped me become more independent and confident" (School 27, female)

"Experiences outside the classroom, the real world, learning and trying new things, realising what I liked and didn't like. TY opened my eyes to life after school" (School 27, female)

"Growing as a person, becoming less judgemental of others, more time to discuss what I wanted to do in college, confidence to express my views, learning to go after what I want" (School 40, female)

Experiences such as these can imbue, or accelerate the development of, a greater sense of responsibility in participants. The chance to build team skills and work on collaborative projects with fellow students, teachers, and non-school organisations are, for most students, not available outside Transition Year, and provide a welcome opportunity to showcase their abilities. Reflecting this, 'responsibility' emerged as a core theme at the heart of several key outcomes reported by students here, manifesting in diverse situations. For example, the following selection of quotes represents a snapshot of personal development in a 'real world' or 'adult' setting on work experience placements; in a social and professional capacity through group activities and self-organised events; in terms of community participation and social work; and educationally, through sharpened focus for the Leaving Certificate:

> "There was much less pressure, but we still did useful things. I improved on maths a lot. Having responsibility for things like a food appeal was nice" (School 16, male)

> "Participating in the Saint Vincent de Paul charity (weekly initiatives for old people, organising events). Community care. Irish wheelchair assistance and [local] hospital. Work experience. [Local] Youth Club service" (School 18, male)

"Gave me time to clean my head of things from Junior Cert. Made me realise how much hard work I would have to do in 5th year and that I did in 3rd year" (School 33, female)

I learned a lot about entrepreneurship completing the [AIB] build-a-bank challenge, working in the school canteen, getting work experience and raising ϵ 2200 for charity. I learned an awful lot as it brings the year group together as everyone must work together, e.g. creating stage sets and doing a musical. It definitely lets people shine and instils confidence and atmosphere similar to the work place" (School 33, male)

"I loved TY because we got to do work experiences and we went on residential trips. I loved having the responsibility and freedom with the mini-companies" (School 35, female)

The idea of responsibility also features indirectly in another recurring theme – that of improving student-teacher relations. Teachers were referenced in a positive light by Fifth Year students in a manner that was not as noticeable among students still in Transition Year. This may be an indication that the experiences and skills gained by students during TY facilitate an easier working relationship with their teachers after they return to a more structured learning environment. It may also suggest that more personal and supportive relationships were formed during Transition Year but perhaps not fully appreciated as such by students while they were still in the 'gap year' frame of mind, becoming more apparent in senior cycle classes. Furthermore, it seems reasonable to suggest that the sense of responsibility and desire to improve themselves that is noted in other contexts by students may also be recognised by teachers, contributing to a greater level of mutual trust and respect. As noted in Chapter 2, improvements in student-teacher relations are important in themselves, but can also contribute to a more general improvement in school engagement:

"I got to experience different subjects and gain different skills. School was more interesting to go to" (School 12, male)

"The freedom to do what you wanted to do. To finally have the teachers trust you with tasks about school show" (School 22, female)

"The work experience and the way that teachers began to respect me more" (School 40, male)

Another notable feature of the Fifth Year responses was the extent of interaction between the key benefits that were cited. For example, aside from the intrinsic reduction in stress, having an extended break from more pressured schoolwork was credited as a reason why students were able to get involved in extracurricular activities and community events. These activities, in turn, were associated with broadened horizons, new skills, and greater confidence and maturity. The lack of high-stakes exams also functioned – in conjunction with the availability of subject taster modules in school and work experience placements – as a facilitator for discovery and reflection on what subjects were the best choices for senior cycle and third-level, and what sort of career might be desired after leaving school:

"A year off from intense work. A chance to try new things. I got my bronze Gaisce award, went on an exchange to Boston. Went to Calcutta [with the Hope Foundation]. Great experiences" (School 18, male)

"Less homework = more time to play music (violin and piano). Helping people with special needs. Visiting the elderly. Time to relax" (School 20, female)

Seen in this way, the various aspects of Transition Year participation can – in the ideal scenario experienced by some students – contribute to a positive cycle of development where new experiences promote new skills and encourage personal growth in a self-reinforcing loop. Of course, not all students have this ideal experience. The next section deals with Fifth Year students' criticisms of the programme.

6.4.3 What were the worst things about TY?

Participants' self-generated feedback on the worst aspects of Transition Year covered a series of distinct, but related, themes. The most prominent criticism of the programme was the level of boredom or a general sense of aimlessness:

"Being bored in class most days, having nothing to do but talk" (School 14, male) "The monotony" (School 15, male)

"Constantly doing nothing" (School 22, female)

As shown in previous sections, one of the main attractions to Third Year students is the chance to have an extended break from schoolwork in Transition Year. However, it seems that many would not have chosen to take part if they had anticipated remaining idle to the extent reported by some TY and Fifth Year students. Students who cited boredom as the worst thing about TY often left it as a one-word answer or short paraphrase (as above), and it may be constructive to view this boredom as a symptom of more general dissatisfaction with the TY experience. More extended responses provided by other students suggest two key proximate factors that may have contributed to this state of dissatisfaction.

The first of these key factors is one also referenced by the Transition Year students (Section 6.3) – namely, the disparity between what students expected to happen during their Transition Year and what they actually experienced. This disparity can arise in either of two ways. Students may have entered Transition Year expecting a variety of exciting experiences and trips but instead found a more underwhelming reality, whether because of the limited range of activities available in the first place or the disappointing quality of the activities that were provided:

"A lot of things had been promised but not given (e.g. trips, tours)" (School 14, male)

"It was boring. We repeatedly watched movies. Few things were taken seriously by students and teachers alike" (School 27, male)

"Too much hype, didn't do anything they said we would" (School 36, male)

Alternatively, students may have been broadly satisfied with some aspects of the year (e.g., having access to a range of subject taster modules in school to help them think about choices for the senior cycle). However, the balance of activities inside the school and outside the school appeared to be very important to participating students, as was the balance of 'serious' activities to 'fun/independent' activities. In addition, the manner in which they felt they were treated by teachers was crucial – for example, the extent to which they were given more freedom and encouraged to take more responsibility for their own learning, as opposed to being monitored to the same extent as they were in junior cycle. Where the balance tipped too far towards schoolwork and strict supervision, there appeared to be a danger that the Transition Year experience was not sufficiently differentiated from the experience of other grade levels. It seems that if TY comes to be seen as just another schoolyear for any of these reasons, it can negate the very essence of the programme – again, fostering a disparity between expectations and reality:

"It is a waste of a year. Teachers are still really strict" (School 12, female)

"Too many projects, not nearly enough fun activities outside school. All trips were open days which are important, but trying new things would have been good too" (School 27, female)

"The worst thing was that we did little work outside of school" (School 36, male)

Students' reactions to the discrepancy between their expectations of the year and what they found ranged from a general sense of disappointment to a more focused feeling of having been misled by teachers. The latter, particularly, comes with worrying implications for student-teacher relationships and sense of connectedness, and hints at the second key factor contributing to boredom and unhappiness with the year.

Transition Year is more dependent than more mainstream grade levels on having a particular person, or group of people, to drive the initiative within the school. The importance of a committed and enthusiastic TY coordinator – or, ideally, a coordinating team – is crucial to the success of the year (Jeffers, 2010, 2015). However, the delivery of the programme cannot rest solely on one person, and in order to deliver full effect the wider body of school staff must attain a certain level of investment in ensuring a positive experience for the participating students. Students are acutely sensitive to the behaviour of their teachers, and in some cases here they reported the perception that their classes were not

being taken seriously. If teachers are seen as treating their Transition Year classes as a nuisance or as a free class for themselves, their students are very likely to disengage:

"[The worst thing was] the lack of interest our teachers expressed in our year" (School 15, male)

"Complete waste of time, the school staff [made] no effort to engage students in beneficial exercises" (School 15, male)

"Class was boring as teachers didn't take TY seriously and neither did the students" (School 28, female)

"Lazy attitude by some teachers, feeling like you're wasting valuable time" (School 40, female)

When such experiences cause students to lose interest, particularly if it happens early in the year, their apathy – or disruptive behaviour stemming from boredom – can have knock-on effects on the rest of the class group, further contributing to disengagement:

"[The worst thing was] other people's pessimistic attitudes. They said that TY was a waste of time and they wish they did Fifth Year instead. I feel that a retreat in the early months of the year would have helped" (School 25, female)

Organising a Transition Year programme comes with complications and stresses that are unique to the year. TY coordinators are expected to find and book speakers from organisations and business to come into the school; to help students source and apply for work experience placements; to devise, organise, and timetable engaging activities and modules both inside and outside the school, often involving non-school staff; to find, budget for, and organise trips away, often involving overnight stays, and so on. Such outings tend to be among the aspects of the year most remembered by participants. However, in the midst of these activities students still remain in more traditional classroom settings for substantial periods of time, and if these classes fail to engage TY students it can undermine the rest of the experience.

Some students, in response to the question heading this section, said that the worst thing about TY was that they had too much work to do in class. Others said that they enjoyed the year but would have preferred more work that would have warmed them up for Fifth Year. Reconciling these disparate preferences may be easier said than done – particularly considering the guidelines that prohibit beginning Leaving Certificate material – and is likely to depend on the school context to an extent. The Professional Development Service for Teachers (http://www.pdst.ie/TY), incorporating the former Transition Year Support Service, aims to support teachers of Transition Year classes and makes available resources and expertise aimed at assisting in developing classwork for TY groups.

A final point worth making is that a lot of Fifth Year students who answered the other questions left this one blank – presumably because they had no strong feelings about any negative aspects of the year. A number of students – particularly in School 35 and School 40 – went further to remove this ambiguity by explicitly writing "nothing" (i.e., there was no worst thing about TY) or, in one case, "the worst thing is that it had to end". In other cases an answer was provided, but the problem identified might fairly be described as minor:

"There wasn't really anything bad about TY. Just maybe we were made help out with setting up for parent teacher meetings" (School 16, male)

"There was so much going on, so it was tiring" (School 20, female)

Although perhaps not adding to an understanding of why some students are dissatisfied with the TY experience, the choice to decline to criticise any aspect of the year, even when specifically invited to, is worth noting in itself.

6.4.4 Why would you [not] recommend TY to Third Year students?

The answers of Fifth Year students here tended to cover similar territory to the responses of TY students discussed above (Section 6.3). The two main reasons given for recommending against the year were boredom in class and the risk of losing one's work ethic and thus finding it harder to get back into the habit of studying in Fifth Year. Reasons given in favour of taking part included becoming better-prepared for the Leaving Certificate (both in terms of subject choices and greater maturity); the benefits of knowing more or having made decisions about potential careers and third-level options; being more confident, more socially skilled, more independent, etc.; the idea that it's a once-in-a-lifetime opportunity and Third Year students should make the most of it; and more general positive comments about how much fun was had or how interesting it was.

It was noticeable that more students chose to articulate quite complex answers in responding to this question than for the other questions described above. This suggests a deep reflection on why TY should be recommended for or against, so the responses should provide a good indication of what the most important features of the Transition Year experience are perceived to be, in hindsight, by former participants. Among the most striking endorsements for participation were several comments that credited Transition Year with a personal transition from childhood to young adulthood:

"It is a year that helps mature you. I feel like I changed from a child to a young adult during it" (School 15, male)

"You can change from a young person who's childish to an experienced person who has grown up a lot in the space of a year" (School 18, male)

"If you have the opportunity to do TY and become better, more experienced and mature you should do it. There is no reason to go into 5th year feeling out of your depth" (School 40, male)

This feeling of greater adulthood may be linked to – or representative of – other reported outcomes suggested by students, such as more mature relationships with teachers, more focused motivation towards work, and community participation. For example, the increased sense of maturity that often accompanies participation in TY was linked directly by some Fifth Year students to improved attitudes towards schoolwork and study. By giving students a taste of life after school, showing them the range of experiences and what can be achieved in the real world, and helping them to decide what sort of work they want to get into, motivation to work and engagement with school are supported:

"Yes [I would recommend TY] because you mature and you're a year older. Have more cop on towards Leaving Cert" (School 12, female)

"Going straight from 3rd year to 5th year is a massive jump, with no break. TY shows you other aspects of life and education and helps you to mature" (School 25, female)

"It helped me decide what I want to do after school. Helped me mature and am now studying better" (School 40, male)

"You're more motivated in 5th year after a year off and you grow up so much in the year" (School 40, female)

Such comments may go some way to allaying the commonly-held fear that students could lose whatever habit of study was gained in preparation for the Junior Certificate examinations. However, they must be counterbalanced by a recognition that a small but non-trivial proportion of Fifth Years nonetheless reported finding it hard to settle back into study. Coming from Fifth Year students, this seems to represent the most serious reason why a Third Year student may wish to consider skipping TY if they held such concerns:

"Work is harder to get back into" (School 14, male)

"I think it is too difficult to get into the study routine for Fifth Year. I think that 5 years of secondary school is enough" (School 20, female)

"Yes and no; transition year definitely forces people to mature and be independent but it also ruins any work ethic you built up during 3rd year" (School 22, female)

One possible way for schools to deal with this concern would be to look at rebalancing their TY programme with a greater focus on classwork, particularly where more students are likely to be at risk of academic disengagement. A similar notion is suggested by Joanna Siewierska (Irish Second-level Students' Union), who notes that some students "almost found [TY] too loose" and might have appreciated more structure in their classroom experience (Jeffers, 2015, p. 8). As discussed above, this runs the risk of defeating the purpose of the year out (if it becomes simply another year of normal schoolwork). However, the feeling from students' responses here suggests that a certain level of 'traditional' schoolwork – leavened with more novel project- and team-based work – would be tolerated by most students as a reasonable compromise, as long as there were also non-traditional activities and trips for them to experience outside the school:

"I felt TY would work for some people but not enough emphasis is placed on the people it might not work for. I feel a more honest depiction of TY should be given to Third Years" (School 22, female)

This idea – that Third Year students should be given an accurate account of what Transition Year is like – is crucial. Here, as in previous sections, the importance of the flow of information to students who are making the choice to participate is noted.

Alongside this responsibility that senior students place on their teachers, though, is the responsibility that they also demand of the younger students who make that choice. This was apparent in the responses of some Transition Year students, but was expressed more strongly by Fifth Year students. In this viewpoint, students must accept that they are accountable for their own actions and are partially responsible for creating their own Transition Year experience:

"Yes [I would recommend TY] if you're going to work but no if not, as it's hard to get back into the routine" (School 12, male)

"If they are willing to try new things and be proactive and not waste the year I would definitely recommend" (School 22, female)

"Yes – it was a good year to try new things, but you get out of it what you put in" (School 25, female)

The advice being given here is that if Third Year and Transition Year students are willing to accept this responsibility, TY is generally seen by Fifth Year students (in retrospect) as being a positive experience. In most schools, the programme that is offered to students provides plenty of novel experiences and good information. In a minority of schools where the TY programme as implemented seems disappointing to participants – for example, because of a lack of activities – they still have a lot more free time available than students in other senior grade levels, which can be used to get involved in extra-curricular activities or to learn a skill. In addition, the chance to experience work placements and get information on possible careers, and to listen to outside speakers, is almost universally provided and in itself is a key experience for many students. Here, although not necessarily enthralled with the

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year, Fifth Year students with specific reservations nonetheless often took care to note the overall value of the programme:

"I learnt a lot about myself in TY but I forgot how to study. It's a mixed bag of emotions, but I think it's an important year" (School 28, female)

"A difficult question as it very much depends on the student. However, though the year was not the great experience I thought it would be, I do feel more suited to Fifth Year than students who skipped TY" (School 40, female)

"Yes – I didn't want to [do TY] but I think it was a good period to consider jobs and think about life and myself" (School 40, female)

In responding to this and previous questions, a majority of students chose to recognise that Transition Year can contribute positively to students' personal development, whether in a holistic sense or in certain specified aspects. Beyond this broadly-held acknowledgement, some students who felt that they benefited from their experiences expressed very strong feelings in favour of the year, becoming almost evangelical in wanting to promote participation as widely as possible. The following comments correspond to similar comments made by Transition Year students who regarded participation in TY as a unique and potentially life-changing experience. For many students, it is described as the best year of their educational careers or, indeed, of their lives to date:

"If you do it then you'll have the best year of your lifetime once you make the most [of it] and get involved in it" (School 12, female)

"I think it is important to have a year that is not academically focused. I feel that most people matured a lot [in TY]" (School 20, female)

"I feel TY was one of the most beneficial years of my school life. I learned so many practical skills. If I could give anyone doing TY advice, it would be to get involved in everything" (School 25, female)

"It's a chance for self-development and it helps you build your confidence by doing things you wouldn't ordinarily do. I don't understand why every year isn't like TY. It's not as if I didn't do any work. I worked and I learned things relevant to me and the world when I leave school... In my opinion TY was the only useful year" (School 33, female)

Such a profoundly positive impact is noteworthy and is a strong endorsement from these students as they approach adulthood.

The final question in this survey was given to their peers who preferred not to take part in Transition Year at all – those in schools where TY is optional who chose to move from Third Year directly to Fifth Year. These non-participants were asked if there were any aspects of the programme that would have appealed to them, had they been given the opportunity in other circumstances.

6.4.5 Are there any parts of TY that you would have liked to take part in?

As this question was directed at the minority of students who did not take part in TY, it received fewer written responses among the Fifth Year transcripts than the previous items. However, from the responses given, some consistent patterns emerged.

Most respondents were happy with not having taken part in TY in general, but regretted missing out on specific parts of the experience. The three main aspects of TY that appealed to students who did not experience them directly were the work experience placements; the trips outside school; and the availability of one or several specific (named) activities or modules that were not typically available at other grade levels, including the chance to try a range of subjects before choosing senior cycle subjects.

Work experience placements were cited as being desirable in the context of students not knowing what they wanted to do after school, and as a way for them to try different things. The experience was regarded as one of the most valuable aspects of the year for students who did take part, and this is something that their non-participating peers became aware of in conversation:

"Yes I would have liked to do work experience" (School 16, male)

"Work experience. I would have liked to do many different things to make sure I know what I want" (School 40, female)

Similarly, the trips out of school that are offered to TY students – exchanges with other schools, trips to universities or outdoor centres, or tours abroad – were missed by students who moved directly from junior cycle to senior cycle. Word-of-mouth from peers was, again, a factor in underlining what was missed by non-participants. Such trips were associated with the social element of TY and having a break from 'normal' school, getting to know classmates and teachers, learning new skills and, not least, having new experiences that may be unlike anything normally available in other school years:

"The outings – when they go on tours. They seemed to have a great time and have lots of stories to tell. But other than that I am happy with the decision I made (by not choosing TY)" (School 22, female)

From a similar point of view – that of having new experiences, broadening horizons, and learning new skills – a range of specific activities or modules were named as things that non-participants would have liked to have taken part in. The variety of activities reflected the fact that the implemented TY programme can vary greatly between schools and between localities. Modules involving community awareness or participation (including Young Social Innovators) and entrepreneurial activities, such as running a mini-company, were particularly

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prominent choices. The chance to try subject taster modules in order to inform subject choices for the Leaving Certificate, or potential third-level options, was also missed by a number of respondents who would have preferred the opportunity:

"YSI [Young Social Innovators] and foreign trips" (School 12, female) "Trying different subjects for a certain length of time" (School 35, female)

"I would have liked to be part of a team for the mini-company because not only do you get the chance to be creative, you gain the experience of running your own business" (School 40, female)

These features of Transition Year are, at the moment, mostly lost to students who do not take part in the extra year. Third Year students who choose not to take part in TY do so consciously and rationally (Section 6.2), and there is little indication in the comments of these Fifth Year students that they would make a different choice if given the chance to go back. However, it is clear that there would be some appetite for making certain elements of the Transition Year experience available at other grade levels, if this were feasible. How this might be organised at a practical level, and how closely such an experience would correspond with its TY equivalent outside the environment of the 'year out', is less clear, and would require significant consideration.

6.5 Pulling it all together: Key findings on the TY experience

The views detailed in this chapter provide a wealth of information about what students think of Transition Year at several key stages of their post-primary careers – before, during, and after the year. The overriding impression, generally, is of great consistency among the views of students from each of the 20 schools that were surveyed. Nonetheless, participants reported some distinguishing characteristics that highlight notable differences between the TY programmes of particular schools, as well as differences in certain aspects of student opinion both within and between schools. Several major issues arise from this feedback.

First, the flow of information about Transition Year to Third Year students demands further attention. Nearly two-fifths of all students who had gone through the programme said that it wasn't what they expected. One-quarter of students said that their own school had not given them enough information about TY. In rare cases, very high proportions of students within a school were unhappy with the level of information given, but the desire for greater clarity was noted to some degree by students in all participating schools. The consequences of being insufficiently-prepared for the highs and lows of the year are hinted at by much of the subsequent criticism that was expressed – with some students feeling bored in class and others surprised at the level of work, or being disappointed by certain activities, not being able to participate in certain activities, not fully realising the additional expense of the year, and so on.

Peer reports are clearly an important informal source of information about TY for many students, and it may be worth exploring how further advantage could be taken of the experiences of past participants in the programme. Many schools already involve former participants in selling the year to Third Year students, but there seems to be scope for a more systematic way of passing on these personal experiences. Any testimony from previous participants to younger students should be clear about both the high points and the downsides of the year. This is particularly important in schools where greater proportions of students may be at risk of disengagement if they enter TY and begin to feel as though they are drifting.

Second, following from this, the extent to which a minority of students reported having nothing to do during Transition Year is concerning. Boredom was not explicitly asked about in the Likert statements, so the precise percentage of students who feel this way is unknown. However, we do know that 6% of TY students were unhappy or very unhappy in the year and a further 8% were dissatisfied with TY, and that, when asked why they felt this way, boredom in class was one of the strongest reasons given. Although periods of boredom or disenchantment are to be expected in any classroom or on any given day – in school as elsewhere in life – the feedback from some students stated very strongly that their boredom was not an occasional experience, but the norm, with most of their days spent doing nothing very much inside a classroom. One response from a teacher's perspective might be that students are learning relevant skills even if they feel that they are doing nothing. Even so, the mere perception of wasted time is damaging in itself when held by students to extreme degrees, and such reports were widespread enough to merit further attention.

Conversely, students who enjoyed Transition Year – the majority of students – often linked their praise of the experience explicitly with recognition that they had been kept busy with a variety of activities and events by the school, or that they had taken their own initiative to spend much of their free time getting involved with organisations outside school. From this it appears as though the density, or spread, of activity throughout the Transition Year is of some importance to students. That is, it is not sufficient to have one (or even several) major event(s) if the rest of the year is spent listlessly. In addition, in the small number of schools where students reported the perception that they were always in the classroom and

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always doing the same things, enhancing the variety and breadth of the TY experience may be rewarding by helping to raise interest in the year.

Third, the role of the Transition Year programme in relation to student disadvantage deserves further examination. Provision of the programme is known to be less common in DEIS schools, vocational schools, and schools where relatively more students are from socioeconomically-disadvantaged homes (Clerkin, 2013; Jeffers, 2002; Smyth et al., 2004). The findings reported here show that, where Transition Year is provided, Third Year students in DEIS schools were less likely than other students to think that the Transition Year in their own school is a good experience, and were nearly four times more likely to believe that TY is not a good experience in general. In addition, feedback from Third Year students suggested that, even if they are positively disposed towards the idea of TY or think it can be a worthwhile experience in some circumstances, they may not see it as the best choice for themselves. Skipping TY in favour of moving directly towards the senior cycle was seen as a more pragmatic option in some cases, either because of concerns about losing the habit of study, or because the opportunity cost (spending an extra year in school rather than getting out into the real world a year earlier) would not be worth the experience.

The responses discussed in this chapter show that skipping the year out is not a decision taken lightly for many students. Rather, it is a considered and rational response to the perceived pros and cons of participation. It must be noted that this line of reasoning is not unique to students in DEIS schools – it occurs to varying degrees everywhere – and also that many students in DEIS schools do take part in TY enthusiastically. However, it is clear that the pattern of regarding Transition Year as a worthy but unviable option occurs with greater relative frequency in schools with more disadvantaged student populations.

Considering the extent to which TY was reported as having positive, even lifechanging, effects on some participants here, it is disappointing if the social experiences and skill development that occur during the year are not seen as being realistically available to some of the students who might benefit most from the experience. Concerns relating to ongoing academic performance and study habits were repeatedly cited as being among the biggest contributing factors to students' doubts about taking part in the year, suggesting that clearer or more focused support for academic subjects during Transition Year may help to make it a more viable option for students who are interested in some aspects but otherwise unwilling to take the risk. Fourth, the opposite problem is raised by the issue of compulsory TY programmes. While in Third Year, students in schools where participation in Transition Year was mandatory were as enthusiastic about TY as students in optional schools, with most (83%) endorsing the TY programme in their school. However, having gone through the year, Transition Year students were more likely to say that they were unhappy with the year, that they hadn't enjoyed it, that it wasn't useful, that it wasn't what they expected, that they weren't given enough information about the year, and that they felt less well prepared for the Leaving Certificate if they had been part of a compulsory TY programme. They were also more likely to recommend against TY participation -25% of TY students where participation was compulsory, compared to 16% of students who opted into the programme. This pattern remained even as the students moved further through senior cycle into Fifth Year and Sixth Year.

Although the majority of students were positive about their experience, these figures highlight the negative feeling that could be engendered by forcing a minority of students to spend an extra year in school if they are strongly against doing so. For example, feelings of having wasted a year or losing the habit of study are likely to increase the risk of disengagement from school. In some circumstances, particularly in smaller schools, running a Transition Year programme is not administratively or financially feasible unless the full cohort takes part. In other schools, the decision to make TY compulsory is policy-driven; if the principal feels that participation is beneficial and wants all students to experience these benefits, for example (Jeffers, 2010, 2015). Notwithstanding the benefits of engaged TY participation, the critical feedback of students here suggests that – in the latter scenario, particularly – the decision to make TY compulsory creates an added responsibility for school staff to ensure that participation is, in fact, engaged. If students remain staunchly unwilling participants throughout the year, they are unlikely to reap the full intended benefit of the experience in any case.

This leads to the fifth observation. One thing that becomes clear from the collected transcripts is that any individual student's experience of Transition Year can be hugely different from another's, both between and within schools. The success of Transition Year is particularly vulnerable to the interaction between two of the main determinants of student expectations for the year. The first is that the nature of Transition Year as a standalone year means that students entering the programme implicitly hold TY to a higher standard than other grade levels (in terms of interest, novelty, and enjoyment) and, simultaneously, to a lower standard than other grades (in terms of the nature, level and quantity of academic

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work). However, the ratio between these standards, to a Third Year student, is an unknown quantity – and one which is unknowable, except in broad outline. Because of this, and particularly in cases where the provision of TY within a school is liable to annual variation, individuals' expectations are likely to differ from each other more widely at the beginning of Transition Year than at any other point in the post-primary cycle except, perhaps, at the transition point from primary education into First Year post-primary.

On top of this, Transition Year coordinators are tasked with designing a programme that achieves an appropriate balance of the activities that students are generally most eager for (e.g., work experience or trips to adventure centres) with other activities that elicit more varying degrees of interest (e.g., particular modules or speakers) and those that may be seen as less exciting again (e.g., English, Irish, or maths classes). The content and delivery of the year has to respond to a broader range of expectations than at any other grade level. The idealised TY programme would succeed in upholding and consolidating basic academic standards following from the Junior Cycle while also providing novel, interesting experiences inside and outside the school on an ongoing basis, including large-scale events and a reasonable proportion of interaction with real-life workplaces. In addition, reports from students here and from previous research (Jeffers, 2015) make it clear that engagement and enthusiasm by the wider teaching staff, not just those directly responsible for organising TY, is crucial to unlocking the full potential of the year.

Creating a successful TY programme is clearly a significant challenge, and one which is ably faced by coordinators in schools across Ireland. However, the wide range of student expectations for the year, coupled with variation in the make-up of the programme within a school, can lead to frustrations being expressed in opposite directions even by students within the same school. Students' responses here suggest that, where frustrations exist, they tend to be accentuated by the nature of Transition Year as an 'extra' or 'add-on' year in the post-primary system. In other words, if TY comes to be seen as a waste by a student, it is a bigger frustration than if they had wasted their time in a junior cycle or senior cycle year because, in most cases, they were always likely to go through the other school years but did not necessarily have to sign up for TY. Transition Year, in this light, may be seen as coming with an opportunity cost if it does not meet expectations.

The discussion has, thus far, mostly dealt with aspects of the programme that may require some attention. However, the final – and most important – point to be made is that despite these specific concerns, by far the most consistent feature to emerge from the student feedback is that Transition Year was a very positive experience for the vast majority of students. About four in every five TY students said that they were satisfied or happy with the experience. A similar proportion would recommend TY to Third Year students, having taken part and knowing what is involved. Three-quarters of TY students found the year to be enjoyable, increasing to near 90% if more ambivalent responses ("ok") are included. Three-quarters of students felt they were given enough information by their school before beginning the year. About half of all TY students felt better-prepared for the Leaving Certificate than they would have without TY, and another one-third of students reported that the year out did their Leaving Certificate preparation no harm. Given the real concerns about TY and subsequent academic performance held by many students and parents, these figures are worth noting. Fifth and Sixth Year students noted the new friendships that were made during TY, their increased confidence following the year out, their better subject choices for the Leaving Certificate, the new skills they learned and are learning, their greater knowledge about what they want to do after school, their experience of learning to work collaboratively in a team, their improved organisational and self-management skills, and the benefit of seeing more links between their schoolwork and how it may be applied in the real world.

These figures give some sense of the broad extent of students' positive impressions of the programme. The depth of this feeling is best appreciated through the additional comments provided by students across all grade levels – Third Year students who were very much looking forward to it, TY students who didn't want the year to end, and Fifth Year students who looked back and described TY as the best year of their lives. Although the feeling was not shared by all students, many participants provided incredibly positive comments on their time in TY – in some cases crediting it as a turning point that may turn out to have changed their lives. In that light, the concerns expressed above should be regarded as constructive criticism that is aimed at improving and making more widely available a programme that appears, in general, to be a very valuable experience for most participants. The observations made here feed into the discussion and recommendations presented in the next chapter.

Chapter 7: Conclusions and recommendations

This thesis has focused on the contribution of the Transition Year programme to adolescent development in Ireland (following the six research aims presented in Chapter 1). Although previous studies have provided strong evidence that students and teachers alike see benefits to participation for many students, quantitative measurements and statistical analysis of these benefits have been absent from the literature. This study provided the first such examination of the extent of socioemotional development that can be linked directly to participation in TY. Baseline levels of selected psychosocial characteristics – including student engagement, student-teacher relationships, social self-efficacy, subjective age, self-reliance, work orientation, and life satisfaction – were established in Third Year for participants and non-participants (Aims 1-3; Chapter 4). Then, controlling for these baseline measurements and other relevant characteristics, developmental changes over time and the extent of differences between TY participants and non-participants were monitored (Aims 4 and 5; Chapter 5). The statistical analyses were supported by students' contemporaneous descriptions of their experience of the programme (Aim 6; Chapter 6).

7.1 Key findings: Socioemotional outcomes

Previous chapters have presented data on a range of issues pertaining to students' participation in Transition Year. Drawing the main features of each chapter together, the key findings are set out below. First, findings related to the empirical analyses of students' entry into TY and their socioemotional development are discussed.

7.1.1 Who takes part in Transition Year?

At the school-level, as of the 2014/15 school year, most post-primary schools around the country (89%) offer a Transition Year programme. Provision of the programme has become increasingly widespread over the two decades since mainstreaming, although it remains less common in vocational schools and those with greater concentrations of student disadvantage. At the student-level, about two-thirds of students (65%) took part in TY in 2014/15, with participation rates consistently increasing over recent years.

In this study, younger students and those with higher educational aspirations were more likely to choose to take part in Transition Year, with all else being equal. Participation was less likely among students whose home language is not English or Irish, and among students whose parents had lower educational qualifications. In addition, students who did not know, or were not sure, what sort of job they wanted after leaving school were more likely to take part in Transition Year than students who had more certainty about their desired career. As an alternative phrasing – since a majority of students nationally now take part in the extra year – it might be more accurate to say that students who knew what job they wanted by Third Year were more likely to opt *out* of TY. This was one of the strongest predictors of TY participation, and suggests the value of the role of Transition Year as a gap year during which students can think about and explore their options for life after school.

Latent growth modelling (Chapter 5) indicated that students who took part in Transition Year reported significantly higher feelings of belonging at school, more positive relationships with teachers, greater cognitive engagement in learning, more positive perceptions of their schooling experience, greater global life satisfaction, greater satisfaction with their school lives and greater satisfaction with themselves, at the end of Third Year, than students who went on to skip the programme. However, when considered as a whole and simultaneously controlling for the other psychosocial variables (Chapter 4), three significant independent predictors of TY participation remained: higher engagement, more positive perceptions of the school experience, and lower autonomous motivation. Ideas for further examination of patterns of change over time among these related variables are discussed below.

The stronger sense of engagement among TY participants suggested by these models is borne out by self-generated comments from Third Year students. As noted in Chapter 6, some students who intended to skip TY referenced their desire to finish school in five years rather than six as a major factor. This is consistent with a perspective of secondary school as something to get done, rather than something to enjoy. Another key reason given for not taking part in TY was the sense that the year out could lead to losing the habit of studying. The awareness of the possibility of disengagement from school suggested by these comments corresponds with the quantitative measurements showing that students who move directly to Fifth Year tend to be less cognitively engaged with schoolwork, on average, in the first place.

The growth models show that potentially-protective factors such as a strong sense of school belonging and strong relationships with teachers are less common among non-participants, for whom they might otherwise function as a buffer against the risk of early disengagement. When both affective and cognitive measures of engagement in school are low in Third Year, the choice to move past TY seems particularly reasonable, particularly if the programme in an individual school does not sufficiently motivate participants on an ongoing basis. Student comments raise this perception as a real concern in some schools.

These factors sit alongside assertions from some students that spending an extra year in TY would not be a productive use of their time (e.g., "waste of a year"), which supports the finding that non-participants held significantly lower assessments of the value of their school experience (school legacy) by the end of Third Year.

The finding that students who were happier in school and had better relationships with their teachers were more likely to sign up for TY has implications for programme availability beyond simple school-level provision. It means that some students who might be able to benefit from TY – for example, boys who aren't very self-reliant (see below) – are missing out because they are disengaged and don't want to have to spend any more time in school, or with their teachers, than is necessary. In other words, students who might already be at a disadvantage, in terms of their attitudes and behaviours at school, are less likely to gain from any positive experiences that are on offer during Transition Year.

7.1.2 Subjective age

Students who took part in Transition Year reported feeling significantly more mature – or older than their age – after TY, even when their actual (chronological) age and perceived maturity in Third Year were taken into account. Subjective age is an inherently relative concept that exists only in conjunction with one or more reference points, such as the peer group. Therefore, it is useful to interpret changes in subjective age among TY participants and non-participants with reference to each other. Although the average perception of subjective age for both groups was not significantly different at the end of Third Year, students who took part in TY grew to feel relatively older over the following two years, while students who moved directly to Fifth Year felt relatively younger. This is exemplified by the finding that students who skipped TY felt less mature, in Sixth Year, than their former classmates who were a year behind them in Fifth Year. This pattern was found for both male and female students.

These changes can be explained in comparative terms, reflecting the mixing of formerly separate student cohorts. Mixing the two groups in this manner may lead to a resulting feeling of being younger (for non-participants) or older (for TY participants) than previously. In the simplest terms, Fifth Year students who had taken part in TY will tend to be chronologically older than students who came directly from Third Year and have become part of their peer group. Beyond that, the contrasting perceptions may reflect students' feelings of their own maturity compared to their peers who did, or did not, experience Transition Year. Written feedback from TY students and from Fifth Year students who had taken part in TY often included references to becoming more mature during TY, of achieving a sense of adulthood, of being less childish than they were, and similar variations. Although not all students have a positive experience of TY, such enhanced feelings of maturity are typical among the majority who do enjoy TY and find it to be a useful year. As suggested by the model of subjective age, these findings support the view that the varied experiences of Transition Year can generate, or accelerate, a real sense of adulthood in participants.

7.1.3 Self-reliance

Three differing patterns were evident in terms of student's developing sense of self-reliance. Boys who went through TY reported significant increases in self-reliance over the two years of the study, signifying a greater sense of willingness and ability to take appropriate action in a given situation. In contrast, boys who skipped TY reported significant decreases in selfreliance over the same period. While Transition Year participation appeared to be differentially related to boys' sense of self-reliance, there was very little change for girls, whether or not they took part in Transition Year. Research suggests that male students can be less engaged than their female peers by very structured classes of the type that are typical at junior cycle level in Ireland (Martin, 2004, 2007; van Houtte, 2004). It is possible, in this light, that the more participative and hands-on nature of Transition Year is particularly valuable in terms of giving boys more opportunities to (positively) influence events in the classroom in a manner of their choosing, thereby enhancing their capacity and willingness to take action again in the future.

Students' written answers point to three facets of this change. First, a heightened sense of self-reliance is echoed in comments from students who described the practical and organisational, or self-management, skills learned through the range of experiences in Transition Year. These skills give students greater ability (and, notably, a *feeling* of greater ability) to look after themselves. Second, the contrasting patterns of change between male participants and non-participants suggest an additional element of implicit comparison among male students with their new classmates in Fifth Year who moved up directly from Third Year. To a former TY participant who feels increasingly able to look after themselves (and has increasing experience of doing so), the younger students now joining them in Fifth Year classrooms may seem like more passive recipients of information from teachers, making demonstrations of their own self-reliance seem more meaningful. For non-participants, the comparison can be made in the opposite direction.

Third, comments putting forth the idea that 'you get out of it what you put in' serve to emphasise the fact that, with relatively little external pressure on TY students, those who become adept at doing things for themselves tend to get more out of their year. References to 'taking the initiative' and 'being proactive' reflect the importance of intrinsic motivation to a successful TY experience. Reductions in external motivation during TY – for example, feeling less pressure to study from parents or teachers – may, in itself, act as a stimulus for increasing self-reliance by redirecting a student's locus of control⁴³ from external sources to internal control (Deci & Ryan, 1985; Pintrich & Schunk, 1996). This would be expected to contribute to a more self-determined perspective for students, and therefore a stronger sense of control over their actions and any resulting outcomes.

7.1.4 Other socioemotional outcomes

In contrast to the results for subjective age and self-reliance, patterns of change over time appeared to be similar for TY participants and non-participants for the other socioemotional outcome measures when students' background characteristics were accounted for. As discussed above, significant differences were found for several outcomes by the end of Third Year between students who subsequently went on to take part in TY and those who did not, but these differences neither expanded nor contracted over the following two years.

Stronger associations with TY participation might have been expected for some of these outcomes, based on the suggestions of previous research. For example, written comments in this study that accompanied the quantitative data often described TY participants as feeling more socially-skilled and better able to interact with their classmates and with adults (employers or teachers) as a result of Transition Year. Similar comments have been reported in previous studies (Irish Second-level Students' Union, 2014; Jeffers, 2007a; Smyth et al., 2004). However, these qualitative perceptions were not reflected in the quantitative growth model for the social self-efficacy measure, which showed that participants and non-participants reported similar patterns over the three waves of the study.

Considering the comparisons drawn in Chapter 1 between TY and traditional gap years, it is of interest to note that a recent study of outcomes associated with gap year participation in Australia and Finland similarly found weaker measurable evidence of specific benefits (goal commitment, satisfaction with career prospects) than had been expected based

⁴³ The extent to which they believe that they, rather than others, exert control over their lives.

on previous qualitative research (Parker et al., 2015). It may be that some students report large changes in social confidence and skills from their participation in TY but other students achieve different outcomes from the year, so that any beneficial effects of TY participation on a particular measure (e.g., social self-efficacy) are washed out by focusing on averaged scores across the entire cohort. If this is the case, more finely-grained analysis would be required to identify particular groups of students for whom particular outcomes are likely or for whom particular aspects of the year are of special interest, and to determine the relative proportions of students in each group. Similarly, given the substantial variation between schools in what makes a Transition Year (see Section 7.2.4), further analysis could usefully focus on determining the impact of various school and programme characteristics to a 'successful' TY. These issues are discussed further next.

7.1.5 Tensions between quantitative and qualitative findings

The quantitative (Chapter 5) and qualitative (Chapter 6) data reported in this study seem, if considered in isolation, to present somewhat differing views of the value of Transition Year. This requires careful interpretation. The results of the latent growth models showed significant differences in development between TY participants and non-participants for two of the outcome measures: self-reliance and subjective age. For the other outcomes measured here, there appeared to be no measurable advantage accruing from participation in TY (on average, although this does not preclude the possibility that participation might be particularly advantageous to certain students). However, significant differences between participants and non-participants were already evident *before entry to TY*, in Third Year, for several measures related to their engagement and happiness at school. This is likely to have arisen as a combination of student self-selection and schools' management of the enrolment process for Transition Year (see also Section 7.2.3, below).

Putting these findings together, it is worth considering whether one factor in the very positive experience that students and teachers report having in TY might be that the extra year can serve to 'isolate' the students who are already most engaged – those most likely to get involved and be enthusiastic about TY activities – into one group, while their less-engaged peers skip the year. If this leads to fewer disciplinary issues in TY, greater cooperation in class, and so on, it might provide opportunities to consolidate already-positive relationships. If this is the case, reports of improving relationships in TY might reflect a qualitative change in the *nature* of the student-teacher relationship (facilitating more adult

interactions) rather than the *direction* of it (i.e., it is not necessarily that students who previously disliked their teachers grow to like them during TY).

Looking only at the results of the latent growth models, it may appear as though Transition Year is not currently as effective at promoting personal development in adolescence as is often thought. However, as discussed in Chapter 6, the student voice that emerged from their self-generated responses was clear in painting a very positive picture of their experience in Transition Year and the benefits and skills that many students attribute directly to their participation in TY. Moreover, the written comments provided by students for this study correspond very closely with the findings of previous studies which have addressed the question through different methods, via focus groups and interviews, and by talking to parents and teachers as well as students (Irish Second-level Students' Union, 2014; Jeffers, 2007a, 2015; Smyth et al., 2004). These studies have also consistently found strong support for Transition Year, albeit with some specific reservations (such as concerns over losing academic focus) which, again, align with the specific concerns reported by participants here.

There are two major points to note from this. The first is to recognise the tensions in the data reported here – the quantitative and qualitative approaches taken for this study have delivered differing views of TY, even though the same group of students was the source in both cases. Quantitative modelling of psychosocial outcomes has provided some support for the claim that TY can help to promote maturity among participants, but the same models also point to greater differences between TY participants and non-participants at the point of entry, rather than over time. Students' self-perceptions, in contrast, are clear in regarding TY, overall, as being a positive and valuable developmental opportunity. Further investigation is merited in order to reconcile these somewhat discrepant views (see Section 7.4 and Section 7.5).

The second point worth noting is that the findings of the latent growth models – and the implications arising – are unprecedented in the extant Transition Year literature. If presented in isolation without context, one might have been tempted to regard the modelled results as an aberration or as being unreflective of the real TY experience, in the sense that they don't correspond as closely as would have been anticipated with previous findings about TY (cf. Jeffers, 2007a; Smyth et al, 2004). However, the qualitative data presented here from the same students strongly suggest that participants in this study regarded their Transition Year experience in much the same way as participants in those previous studies. This provides strong corroborating evidence that these students' outcomes can indeed be considered as a reasonable representation of their Transition Year experience – a view further supported by the systematic random sampling which was explicitly intended to produce a representative sample of students for this study. The main difference is that quantitative measurements of specific psychosocial outcomes have been included here, bringing implicit tensions in assessing Transition Year outcomes to the foreground.

With the wealth of experience and expertise on TY that is available in Ireland, stakeholders have a responsibility to find out as much as possible about what goes on in Transition Year – how it works, why it works, for which students it may work best – and to use that information both to improve TY within Ireland, and as a model for other jurisdictions. The findings from both arms of this study suggest areas where TY appears to be successful at the moment, areas where improvements could be made, and areas where further work and further research is needed in order to produce a more effective programme for all students.

7.2 Key findings: Broader issues

Socioemotional development does not occur in a vacuum. Any discussion of the effectiveness of the programme must consider the needs of students who do not take part in TY, as well as those who do. With that in mind, a number of limiting factors that are associated with negative perceptions of TY are discussed next. Several broader issues relating to the effectiveness of Transition Year as a programme that aims to promote personal and social development, and the opportunities for growth that it can provide to students, are also presented in the following sections.

7.2.1 Compulsory TY vs Optional TY

It is notable that every indicator of students' attitudes that was used here showed more negative perceptions of Transition Year in schools where participation is compulsory. Students in compulsory TY programmes were only half as likely to regard their experience as being useful or enjoyable as students who chose to enrol in the extra year, and were twice as likely to express negative views. Similarly, fewer students in compulsory TY schools reported being happy with the year or felt better-prepared for the Leaving Certificate afterwards. Feelings of disenchantment are particularly apparent when the experienced TY programme is seen by participants as disappointing or boring, which leads students who might otherwise have skipped the year to feel as though they are being made to waste their time.

In most schools, students self-select into an optional Transition Year programme. This study shows that, on average, these students were already more content and engaged at school than their non-participating classmates, even before enrolling in TY. In other words, students who opt into TY tend to form a qualitatively different group of students than their peers who prefer to finish school without the extra year (a point which is returned to below, in Section 7.2.3). These already highly-engaged students may not become any more directly engaged during TY, but their strong cognitive and affective engagement is likely to facilitate active participation in the activities that make up TY - work experience placements, community engagement, subject tasters, and so on - and to learn the skills associated with these experiences. In this sense, the characteristics of participating students interact with the characteristics of the school's TY programme to produce the Transition Year experience. This interpretation is supported by accompanying comments from some students who noted that they consciously tried to make the most of the opportunities of the extra year and the space they were given to 'stand and stare', and from Fifth/Sixth Year students' reports of learning new skills and self-management techniques through the year. In addition, a context effect is likely to occur in a scenario where all or most students are highly engaged, acting to accentuate the positive elements of the programme.

However, discussion of self-selection is only relevant when participation is an option. This is not the case in the substantial minority of schools (about one-quarter) where enrolment in Transition Year is compulsory (Smyth et al., 2004). The student profiles described in Chapter 4 showed little difference in the characteristics of TY participants in compulsory-TY schools compared to optional-TY schools. Even so, mandating participation in the extra year runs the risk of undermining the intended ethos of the programme, as shown by students' comments here (Chapter 6).

One of the main reasons given by principals and coordinators for deciding to include TY as a compulsory element of their school's structure is a desire to make the benefits of the year available to all students. This motivation may be at least partially informed by suggestions from school staff that some of the students who could benefit most from the programme are those who might otherwise be inclined to skip it (Jeffers, 2010, 2015). The findings from this study, of lower engagement and lower wellbeing among Third Year students who go on to skip TY, adds weight to these reports. The intention to include these students in the positive elements of TY is laudable, and clearly not without some merit.

However, students who are not engaged or motivated (for whatever reason) are unlikely to reap the intended rewards of the 'year out'. Student engagement already tends to be lower among Third Years who don't go on to TY, and accompanying comments from TY and Fifth Year students emphasised the negative feeling and further disengagement that can be caused by perceptions of sitting in a classroom doing nothing, day after day. Understandably, frustrations may be more keenly felt when not participating is not an option and the subsequent 'forced' experience of TY is disappointing. It is noteworthy in this regard that rates of early school leaving are found to be higher in schools where TY is compulsory compared to schools with an optional TY or where the extra year is not provided at all (Smyth et al., 2004). The issue of student engagement is discussed further in the next section.

7.2.2 'Doss years' and disengagement as a threat to TY

Negative perceptions of Transition Year among participants in this study focused around two main issues, which can be considered as limiting factors on the programme. These are issues that appear to constrain (or limit) the effectiveness of Transition Year in some cases – or, more simply, reasons why some students might not get as much out of the year as they otherwise could. The first issue is that some participants experienced frequent boredom and feelings of having nothing to do. Students' responses to the questionnaire make clear that in some cases students have an expectation (in Third Year) or report a perception (during Transition Year) of TY being a 'doss year'. This phrasing should not be confused with the alternative perception of TY as a respite from the high-pressure exam-centric environment of more junior and senior grade levels. Students' descriptions of *TY as a doss year* can be clearly distinguished from their descriptions of *TY as a break*.

The defining feature of *TY as a doss year* is that students feel as though they are being left to drift. They report a lacklustre, bored experience characterised by perceptions of doing nothing. This means that the extra year ends up being regarded as a waste of time by students, even when they might have been more positively disposed towards it at the beginning. The very different conception of *TY as a break* aligns more closely with the image of a successful Transition Year experience. Here, the reduction in pressure to study is transmuted into greater freedom for students to spend their time in other positive activities. The wealth of positive reports from students who describe new skills, mind-broadening experiences, and increased confidence all derive from their engagement with these opportunities, which are afforded to students by the absence of high-stakes examination pressures in TY. At both extremes, students' perceptions likely reflect a combination of the characteristics of the Transition Year programme in their school, the nature of interactions

between students and teachers, and the extent of students' own active engagement, motivation, and participation (underscoring the relevance of psychosocial factors, such as self-reliance, to the broader experiences).

Unfortunately, the negative feeling caused by doss year impressions can drain the energy and enthusiasm of both teachers and other students (see, for example, interviews reported by Smyth et al., 2004). As seen in this study, problems are magnified when teachers who are involved with the year are regarded by their students as not taking the programme seriously or as treating TY as unimportant. One finding worth noting in this regard is Jeffers' (2007a) report that, even in schools chosen specifically for their successful Transition Year programmes, substantial minorities of the teachers surveyed said that they did not like teaching Transition Year classes. It is likely that negative attitudes or apathy from teachers can filter down to participants and undermine the ethos of the programme. That is - from a student's point of view - if they feel their teachers aren't taking the class seriously, why should they? In this way, disengaged or unenthusiastic teaching in TY can pose a real challenge to the success of a school's Transition Year programme, and may contribute directly to inhibiting students' motivation and opportunity to engage in growth-promoting activities. In such a scenario, neither the disillusioned students nor their fellow participants, whose TY experience may be diluted by unenthusiastic classmates (Smyth et al., 2004), are likely to unlock the full potential of the year.

The Transition Year guidelines document (Dept. of Education, 1993) is worth considering in this context. In the absence of a centrally-prescribed curriculum for the year (p. 2: "curriculum content is a matter for selection and adaptation by the individual school"), individual teachers and teams within schools are free to innovate both the content and the teaching methods used during TY. Many teachers embrace this opportunity enthusiastically, which has led to the creation of a wide range of interesting modules and approaches to learning that would not have gained traction at other grade levels (Jeffers, 2015). This variety, often drawing on the local community and individual circumstances for inspiration, is integral to the nature of the programme and can provide some of the most memorable aspects of the year for participants. The extent of differences in programme make-up is reflected in students' experiences across the 20 schools involved in this study. In this aspect more than most, a committed coordinator and support from the wider school staff are critical to the creation and ongoing rejuvenation of a school's Transition Year programme (Jeffers, 2015; Smyth et al., 2004; Transition Year Curriculum Support Service, 2000).

Despite these positive aspects to the curricular freedom of TY, there may be a case for refreshing the 1993 Guidelines by drawing more explicitly on the wealth of experience and expertise that has been developed among teachers over the last 20 years. In core or 'continuity' subjects, for example, recent studies have highlighted how mathematics (Moran et al., 2013) and science (Garner, Hayes & Eilks, 2014; Hayes, Childs & O'Dwyer, 2013) classes in TY are failing to reach their potential. For both subjects, teachers were found to rely heavily on traditional teaching resources, including Leaving Certificate material, and reported uncertainty as to how to develop their own material for TY classes.

Helpful resources and examples of successful practice are available and could go some way towards addressing such concerns. For example, Jeffers (2015) includes chapters of relevance to teachers of science, mathematics, history, and Irish, and the NCCA provide sample Transition Units for various topics on their website. As a further response to the problem, in-service training to help teachers deal with the challenge of individualising courses to their own TY classes should be provided, and examples of resources should be more widely advertised to teachers who are not entirely confident with the approaches that are expected of TY classes. Ideally, this would help to ensure that students in all schools could experience a 'minimum acceptable' type, and standard, of Transition Year, reducing the risk of unfocused drifting in the classroom. Notwithstanding more widespread use of wellstructured resources in this manner, the freedom to innovate and broad curricular independence of individual schools should be maintained for teachers who do want to go a step further by continuing to create their own resources or focus on particular topics.

In all cases, Third Year students should receive an accurate depiction of what Transition Year is before making the choice to participate. This was not always felt to have been the case by participants in this study, which clearly contributed to later disaffection with what some regarded as an underwhelming experience.

7.2.3 Barriers to participation

The second major issue fuelling negative perceptions of Transition Year relates to students' concerns about regressing academically during the year – whether by losing the study habits built up over previous years, or by forgetting subject material and finding the senior cycle harder as a result. Reservations of this type were common among Third Year students, and actual difficulties were reported as a consequence of TY participation by some students in Fifth Year. The treatment of core examination subjects, such as English or mathematics, in Transition Year, are worth considering in this light. The TY Guidelines (Dept. of Education,

1993) are clear in saying that the extra year is not to be used as the first part of a three-year Leaving Certificate, but then go on to state that the experiences of TY should leave participants better able and more motivated towards study, in a general sense, upon reentering traditional classes in Fifth Year. The conceptual ambiguity in these guidelines is also apparent in students' ideas about the year. This issue goes back to the foundation of Transition Year (Egan & O'Reilly, 1979), and has not yet been fully resolved.

The desire for a break from study and examinations was found here to be one of the most common reasons cited by Third Year students for wanting to take part in Transition Year. During TY itself, the absence of high-stakes pressure to study was key to giving students the freedom to engage in novel, formative activities outside the classroom. Simultaneously, the fear that participation could hinder their academic progression or result in losing motivation to study was among the most common concerns held by Third Year students – in some cases, contributing to a decision not to take part. Following TY, two-thirds of Fifth and Sixth Year students agreed that it took them a long time to settle back into the routine of a traditional classroom, while more than half agreed that they found it harder to settle down to study. However, few senior cycle students retrospectively considered themselves to have been put at a disadvantage in the classroom by their participation in TY (only 2% feeling this to be *very true*, and 11% *a bit true*), in spite of these initial reservations.

It is notable that concerns of this nature tended to be more strongly-expressed by students in designated disadvantaged schools. In this light, it is worth considering again some of the socioeconomic factors that are known to be associated with participation in TY. For example, designated disadvantaged schools, vocational schools, and smaller schools (those with fewer than 200 students) are less likely to offer a Transition Year in the first place (Clerkin, 2013; Jeffers, 2002; Smyth et al., 2004). At the student-level, lower parental educational attainment predicts non-participation (Chapter 4; also Smyth et al., 2004). As noted above, provision and uptake of the programme, overall, have both increased dramatically since mainstreaming in 1994. However, the relative availability of TY in schools with higher concentrations of student disadvantage (as indicated by possession of a medical card) compared to those with lower levels has not narrowed appreciably over the last two decades (Clerkin, 2013). In some schools TY may be available but positioned separately to the mainstream First Year to "Fifth Year" (known as Sixth Year, in most schools) grade structure, as implied by students in one designated disadvantaged school in this study.

Importantly, nearly one-quarter of non-participants reported, while still in Third Year, that they believe Transition Year to be a good experience in some schools but not in their own.

All of these indicators suggest that some work remains to be done in making Transition Year a viable option for all students. One possibility is to calibrate teaching approaches to core subjects so that, for example, the early part of TY provides students with the desired break and with medium-term project work, while the latter part of the year includes more frequent use of traditional approaches – for example, setting more short-term homework – to help students transition back towards what will be expected of them in Fifth Year classes. Variations on this theme are already in operation in some schools (Jeffers, 2015). Given that the return to regular nightly homework in Fifth Year is one of the major recurring issues for TY participants, another idea for schools would be to adopt a policy of interspersing occasional weeks of regular homework in core subjects throughout the year-long TY, separated by periods of the more typical 'break from homework' approach. Although organising a system such as this consistently between out-of-school activities and other modules could be complicated, it would mean that participants could achieve much of the existing benefits of having a break from high-stakes schoolwork while not straying as far away from regular homework practices as is the case for some students at the moment.

Some illustrative comments in Chapter 6 describe the thoughts of students (particularly in disadvantaged schools) who expressed interest in various elements of Transition Year, but all-in-all thought that the programme was not for them. In addition, it must be recognised that the tendency reported here for TY participants to be a more engaged and 'school-orientated' group of students than non-participants may not simply be a case of more engaged students choosing to take part in the extra year. Previous studies (Jeffers, 2007a; Smyth et al., 2004) have highlighted the role that teachers sometimes play more actively in some schools than in others - in steering Third Year students into or away from Transition Year. This is particularly be the case when places in Transition Year are limited (e.g., if a school with three Third Year classes only has resources for one TY class). At either extreme, this might take the form of a teacher encouraging a well-behaved and highly-engaged, but immature, student to take part, while simultaneously discouraging a student who is less engaged in school life for fear of fostering further disengagement during TY. This approach has been described by one principal as being "a mixture of idealism and realism" (Jeffers, 2007a, p. 224) with regard to the potential for TY to have a positive impact on various students' development. In this sense, the make-up of the profiles of TY students

reported in Chapter 4 may be at least partially a function of selection, or influence, by the schools themselves, as well as self-selection by interested students.

Making the option of Transition Year more widely available for students such as these – who might wish to partake but do not have the option, or who might be discouraged from signing up for the extra year through fear of losing good study habits or for behavioural reasons – should be regarded as a matter of social equity. By mitigating the real risk that TY could be detrimental to vulnerable students' academic engagement and, not least, taking steps to counter the widespread perception of that risk, more students may be encouraged to take part in the programme.

7.2.4 One TY or many? Challenges in assessing programme outcomes

Much of the extant literature on Transition Year focuses on models of good practice in various schools (e.g., Jeffers, 2007a, 2015). In contrast, a nationally-representative sample of schools was selected for this study. Substantial variation is evident in students' experience of the TY programme in different schools – both in the broad sense of their reported attitudes to TY, and in the narrower sense of the specific modules, activities and trips that were on offer in the different schools. The implementation and content of the TY programme in any given school is highly dependent on the Transition Year coordinator and principal in question (Jeffers, 2010, 2011), with official prescriptions limited to the general advice contained in the Guidelines (Dept. of Education, 1993). The variability arising from this means that a student's Transition Year experience is partially a function of the programme offered by a particular school (and in a particular year). These school-level differences in TY programming are likely to play a role in the developmental opportunities and support available to students.

On one hand, this variation poses a challenge to any evaluation of TY outcomes because the nature of the programme (with teachers encouraged to customise TY in their school to their own circumstances) and varying levels of resources mean that there isn't really one TY programme to evaluate – instead, there are many TY programmes with overlapping similarities. Put another way, there is no single 'Transition Year' that is experienced by all participants. It may more accurately be considered a set of related experiences within a broad range of possibilities.

On the other hand, the extent of this variation is unusual in Irish education and presents opportunities for investigating factors that may be differentially associated with particular outcomes. For example, findings of non-significant averaged associations between TY participation and a given outcome do not preclude the possibility that significant associations may be found only in schools where a programme is particularly well (or poorly) implemented, or where certain features of the year are emphasised to a greater extent. Relevant aspects of provision include, for example, programme content and teaching methodologies, as well as structural or organisational issues such as the extent of contact time with various teachers during the year which has implications for the development of student-teacher relations (see, e.g., Jeffers, 2007a). Exploring this variation more fully should be a priority topic for future research.

It is not in doubt that many students affirm strong personal development through their participation in the programme. The student feedback reported here echoes those of previous studies (Jeffers, 2007a; Smyth et al., 2004) and provides a broad endorsement of the programme, with some students regarding TY as a wholly transformative experience. However, stronger evidence of differences associated with TY participation might have been expected to be found here – for example, in terms of social self-efficacy – considering the consistency and strength of such endorsements. This disparity demonstrates the importance of challenging and verifying assumptions about programme outcomes, which should include a variety of methods and approaches. Further work is required to reconcile the very strong qualitative endorsement for the programme found here, and in previous studies, with the comparatively limited quantitative support, to date, of these effects. A key starting point would be to identify a range of relatively 'effective' and 'ineffective' TY programmes, address the commonalities and variation between such programmes, and examine the implications for student development.

7.2.5 Lessons from Transition Year for curricular reform

The ongoing implementation of reforms to the junior cycle (DES, 2015b) – including the creation of short courses, the provision of greater flexibility for schools to adapt their junior cycle programme to their own contexts, and a renewed emphasis on more active and collaborative learning methods in the classroom – could stand to benefit from the lessons gleaned from more than 40 years of teaching experience that have contributed to the development of the Transition Year programme. If implemented effectively and if successful in its aims, we might expect that students who go through the new junior cycle would benefit from some of the positive elements of TY in lower grade levels.

As seen above, students who go on to Fifth Year directly following the JCE often tend to be those who are less engaged and less happy in school, with weaker personal

relationships with their teachers. Therefore, the students who are already experiencing some degree of ill-fit with their school environment are those who are most likely to miss out on the experiences of TY. The irony in this pattern is that the more varied approaches and teaching methods used in TY classes are very different to those that would have been experienced in these students' academic careers to that point (up to junior cycle) – that is, different from the classes with which they report being dissatisfied. For example, Transition Year students tend to react positively to the change from the highly-structured and teacher-led classes experienced in the junior cycle prior to the recent reforms (Gilleece et al., 2009) to the projects, groupwork, and student-oriented environment of many TY classes (Irish Second-level Students' Union, 2014; Jeffers et al., 2007a; Smyth et al., 2004). The latter features are among those which are intended to play a more prominent role in lower secondary education over the coming years (DES, 2015b). The strong endorsement given by Transition Year students to their experience suggests that these changes should lead to a more engaging and more interesting educational experience for future junior cycle cohorts.

As well as enhancing the junior cycle experience for younger students, this may also turn out to have knock-on effects on Transition Year participation in the future. From one perspective, a more engaging and collaborative lower secondary education could encourage greater uptake of TY by lowering some of the academic and social barriers that are currently in place (i.e., by supporting engagement and wellbeing at school to a greater extent than currently). At the same time, it is plausible that if the new junior cycle evolves into a sort of hybrid model – composed of aspects of the existing junior cycle combined with aspects of Transition Year – the unique role currently held by TY in Irish education will become less remarkable. If students and teachers come to view the revised junior cycle as being effective in developing students' personal and social skills in the lower secondary years, the demand for a standalone Transition Year may be lessened (although it is hard to envisage TY uptake dropping dramatically in the immediate future). The development and interaction between both programmes should be monitored over the coming years in order to assess the extent of any changes in TY participation levels and in the type of student who takes part.

From a teachers' point of view, we know that hundreds of teachers around the country have already acquired considerable expertise in developing short courses from their work with Transition Year students, incorporating the creation of module content, learning outcomes, skills, methods, and assessment (see <u>www.ncca.ie</u> and <u>www.pdst.ie</u> for examples;

see also Jeffers, 2015). The same teachers have also gained extensive experience of teaching using more active methodologies in the classroom (group discussions, projects, student-led research, student presentations, portfolios, and so on), again drawing on their experience with Transition Year. Both of these issues are cited by many teachers as something that they are uncomfortable with – or lack confidence in – in relation to TY classes, and it seems reasonable to expect that similar reservations will apply with regard to the revised junior cycle.

This suggests that the professional expertise of current TY coordinators and teachers of TY classes could be promoted more explicitly as a model for teachers who will soon face similar challenges with younger students. The formation of the Transition Year Support Team – a group of 14 seconded teachers with experience of Transition Year – in 1995/96, created with the aim of helping schools to set up TY for the first time as part of the mainstreaming of TY in the mid-1990s, was credited as being a hugely positive influence at that time in establishing and developing Transition Year around the country (Jeffers, 2007a). A similar initiative, drawing on the lessons to be learned from existing TY professionals, would be worthwhile at this early stage in implementing the new junior cycle curriculum, which appears to be based around very similar principles to those underpinning TY.

A final point to consider if we are to take students' reports of their TY experience seriously is how to extend these lessons upwards into the senior cycle, as well as downwards into the junior cycle. Perhaps the single most common reservation about Transition Year at present – both among students who choose to skip the year and among those who do take part – relates to students' and parents' concerns that they will find it harder to settle back into a routine in the high-stakes and highly-structured nature of LCE classes following their 'year out'. Despite otherwise-positive comments about TY, this was reported as being *a bit true* or *very true* by two-thirds (67%) of the Fifth and Sixth Year students who took part in this study. In most public discussion (and, indeed, in this thesis, with a view to providing realistic advice to teachers under current circumstances) this problem is addressed in terms of adapting Transition Year to suit the Leaving Certificate, or by advising certain students to skip TY entirely. Nonetheless, a case could be made for reconsidering the source of the problem. Recent studies have highlighted how the overcrowded curriculum, combined with a high-stakes terminal examination, can lead to teaching that sometimes leans towards

surface learning of examination material rather than deeper conceptual understanding, and favouring students working in relative isolation with more limited use of groupwork or inclass discussion (Baird, Hopfenbeck, Elwood, Caro & Ahmed, 2014; Smyth et al., 2011).⁴⁴ If students emerge enthusiastically from Transition Year but subsequently suffer during the transition into senior examination classes, might the reason be that the LCE classes are not sufficiently engaging to students who have had a taste of the world beyond school and want to prepare for it? Could the senior cycle be adapted to align more closely with the aims and methods of Transition Year (and, indeed, the revised junior cycle)? Future policy reform could usefully examine how students' – and teachers' – positive educational experiences during TY could inform senior cycle teaching and learning.

7.2.6 Final word: the unique role of Transition Year in Irish education

Most students leave Transition Year with strongly positive views of their experience. A large majority are happy with their year out, describe it as being useful, and would recommend participation to younger students. The feedback reported in Chapter 6 provides some illustrative examples of the perceived benefits of participation.

Notwithstanding the criticisms discussed above, the qualitative feedback as a whole presents a picture of a vital programme that provides adolescents with a much-needed opportunity to explore interests, interact with wider society, and develop social confidence and personal skills. The most commonly-cited benefits included a heightened sense of maturity and responsibility, increased confidence, new skills, new friendships, knowing more about what they wanted to do with their lives, better organisational and self-management skills, learning to work collaboratively with peers in a team, community involvement, a deeper understanding of adult life, and out-of-school experiences that contributed to social and cultural learning. Many students reported feeling better-prepared for the Leaving Certificate, both in terms of motivation and because they feel they made better subject choices following TY. As a general outcome, participants commonly described a stronger sense of feeling like an adult following their time in TY. These reports are borne out by measurements of participants' increasing subjective age over the same period.

⁴⁴ It should be noted that collaborative and active teaching methods do tend to be more commonly used with LCA classes, compared to LCE or LCVP classes.

Strong support for the experience comes from comments on how TY helped to clarify or suggest career paths; how it enabled new friendships and social groups to form; how relationships with teaching staff improved; how work experience gave students a direct insight into the world outside school; how new interests and skills were developed through activities both in and outside school; and, generally, how the time and space given to students to engage in all these facets of the programme contributed to a sense of growing up and maturing. For some, the year spent in Transition Year is described as life-changing, or even as the most important year of their lives.

7.3 **Recommendations**

Following the findings described above, this section presents practical suggestions for teachers (drawing on students' feedback to the survey) and recommendations for policy-makers and practitioners in agencies such as the DES, NCCA and PDST (aimed at addressing some current issues and maximising the future potential of the TY programme).

7.3.1 For teachers

For teachers and TY coordinators to consider:

- 1) A substantial proportion of students more than one-third, on average, but higher in some schools reported that their Transition Year experience was not what they had expected. Similarly, almost one-quarter of students explicitly said that their school had not given them enough information about TY before beginning the programme. Supporting comments suggest that there are at least two key areas where communication to Third Year students could be improved. These are, firstly, by going beyond broad outlines in clarifying the day-to-day details of what happens in TY and how it differs from other grade levels; and, secondly, in being careful that participants do not begin their Transition Year with unrealistically rose-tinted expectations of trips, events, and the daily classroom routine.
- 2) Students consistently report more negative experiences of TY in schools where participation is compulsory. Although it is recognised that there may be good reasons for considering compulsory provision of the programme, such a decision should be taken carefully if providing the programme on an optional basis is a viable alternative. Engaged student participation in the opportunities offered by Transition Year should be seen as key to achieving positive outcomes. If the school policy is for compulsory participation, all teachers involved with Transition Year classes (not just TY)

coordinators) should be mindful of the likelihood that some students may not want to be there and take steps to maintain their active participation. This could include, for example, ensuring student involvement and input in the assessment of their activities, or building up a portfolio of achievements and learning experiences on an ongoing basis (Jeffers, 2015).

- 3) In response to student concerns about finding it hard to re-integrate into a 'normal' classroom in Fifth Year and of losing the habit of studying during Transition Year, TY classes in core subjects could begin to taper out of TY and into senior cycle examination mode (e.g., by setting short-term homework on a more regular basis) in the final term of TY in order to minimise the transition. Alternatively, short periods of classes similar to those expected in Fifth Year could be interspersed throughout the year. In this way, the element of having a break from normal school that TY offers participants can be maintained, while lessening the extent to which some students fall out of touch with what will be expected of them in Fifth Year, as the senior cycle currently stands. (Pending the success of ongoing junior cycle reforms, similar reforms at senior cycle in the future would represent an alternative route towards aligning the aims and methods of Transition Year and other grade levels more closely.)
- 4) Many Third Year students, in self-generated comments, described how they were looking forward to TY either because it would give them a chance to spend more time on particular sports that they were already involved with, or because they wanted to get fitter generally and were hoping for more time for P.E. during Transition Year. Comments of this nature were given by many students across all school types. Coming from 15-year-olds – at an age when physical activity and exercise rates often decrease sharply, particularly among girls⁴⁵ – the comments highlight the potential that TY holds as a year during which substantial time and attention could be devoted to health awareness and the promotion of physical and mental health among Irish adolescents.
- 5) Transition Year is a natural space within which positive personal development, social confidence and skill, and student wellbeing can be supported and enhanced. These ambitions are in line with the stated purpose of the year and also with Third Year

⁴⁵ For example, a brief summary of findings from the Health Behaviour in School-Aged Children survey shows frequent exercise among boys in Ireland going from 67% to 55% between the ages of 12-14 and 15-17, while frequent exercise among girls drops from 51% to 28% over the same period. See http://www.nuigalway.ie/hbsc/documents/fs_17_2006_july09.pdf for details.

students' hopes for the programme. The more than twenty years since the mainstreaming of the programme have seen the creation of many innovative, resourceful and popular in-school modules and out-of-school initiatives by participating teachers. Accessible examples of some of these are presented in Jeffers (2015), and through the PDST (www.pdst.ie) and NCCA (www.ncca.ie) websites. Some further ideas and a broad perspective on positive education are given by Norrish et al. (2013), who describe a pioneering and well-implemented programme aimed at promoting positive development in Geelong Grammar School in Australia (their article is free to download here: www.aweschools.com/files/An applied framework for Positive Education.pdf). White and Waters (2015) provide detailed examples of a similar programme in a different school, discussing English lessons, physical education, student leadership, and counselling. Resources such as these should be shared widely, and collaborative discussion between teachers and coordinators across schools encouraged, in order to promote and disseminate examples of good practice. This would provide support for teachers who may not yet be comfortable in creating content or adapting their teaching methods for TY classes. It would also help to ensure that teachers have a wide range of options around which to design their school's TY programme, given local circumstances.

7.3.2 For policy-makers and educational agencies

In order to improve the Transition Year experience for future cohorts:

- The Transition Year Guidelines for schools (Dept. of Education, 1993) should be updated and refreshed with examples of good practice and links to relevant resources. The guidelines should include a commitment to making participation in the year available to all students, as far as possible, regardless of their socioeconomic background or other potential barriers.
- 2) Continuing professional development should be provided to explicitly address the concerns of teachers who are unsure or lacking in confidence with regard to adapting their teaching for Transition Year classes, and should encourage them to make greater use of already-available resources and ideas. Teachers' requests for updated in-service training related to TY and sufficient working time to plan and implement ideas following such training have been identified in previous surveys (Jeffers, 2007a; Smyth et al., 2004), and issues with teaching TY classes are indirectly implicated in much of the negative student feedback to the current study. Professional development

is particularly needed for subjects such as mathematics, English, and science, where teaching during TY often falls back on traditional teaching methods using Leaving Certificate material. By elaborating on models of good practice, drawing attention to external organisations that provide a natural focus for TY activities (e.g., Young Scientist, Young Social Innovators, AIB Build-a-Bank Challenge, etc.), and identifying examples of innovative modules that could be transferred from one school to another with minimal adaptation, the pressure to create content would be eased and teachers who are not as energised by TY might find it easier to maintain momentum and retain student engagement through the year. This could help to address the problem of 'doss year' perceptions (and experiences) of Transition Year.

- Considering the status of Transition Year as a programme that is custom-made for 3) supporting student autonomy, TY-related continuing professional development should emphasise and elaborate on teaching approaches that are known to support learners' autonomy in the classroom (see, for example, the work of Johnmarshall Reeve and colleagues; Cheon & Reeve, 2015; Reeve, 2006, 2009; Reeve & Cheon, 2016; Su & Reeve, 2011). Autonomy-supportive teaching is described as "a set of beliefs and assumptions about the nature of student motivation, [rather than being] a prescribed set of techniques and strategies" (Reeve, 2006), and includes principles such as providing rationales and explaining the value of classroom activities, and encouraging students' effort and persistence. As well as enhancing students' active participation in TY, Transition Year classes offer teachers a chance to hone their autonomy-supportive teaching skills in a relatively low-stakes environment, with positive implications for teaching at other grade levels. Professional development of this nature represents one route through which "the aims and philosophy" of Transition Year can "permeate the entire school" as intended (Dept. of Education, 1993).
- 4) A number of studies have described how provision of Transition Year is lower in schools with greater levels of student disadvantage (Clerkin, 2013; Jeffers, 2002; Smyth et al., 2004). This gap in provision has not narrowed since mainstreaming in 1994 (Clerkin, 2013). (With that said, it should be acknowledged that there is evidence that a considerable proportion of schools that do not offer TY may have done so in the past, but discontinued the programme due to lack of student interest or parental support; Smyth et al., 2004). Where Transition Year is available, student uptake is also somewhat lower in designated disadvantaged schools, largely due to a combination of limited student interest in the extra year including concerns about negative effects on

academic performance – and reservations about the financial implications of participation. Even a basic Transition Year programme involves additional expenses over other grade levels, for both the schools and students' families. These costs are heightened by out-of-school trips and activities which are, nonetheless, often among the defining experiences of the year for students. With this in mind, further resources should be made available to support provision of the Transition Year programme nationally. Any additional resources should be directed, in the first instance, towards designated disadvantaged schools and towards students from socioeconomically-disadvantaged backgrounds in order to ensure that participation in TY is feasible for all students who wish to take part, and so that they may experience an effective programme.

- In the absence of additional resources and remembering that participation in 5) Transition Year is not currently a realistic option for a substantial minority of students - a more radical approach would be to look at ways of allowing these students to experience some elements of the TY programme, at a key stage in their socioemotional development, without having to commit to a full year away from traditional education. Proposals to integrate TY as part of a compulsory three-year senior cycle (e.g., NCCA, 2002) may go too far, given consistent evidence that students who are currently forced into Transition Year tend to feel more negatively about their experience. Nonetheless, in schools without a standalone TY programme, could space be made for work experience placements early in Fifth Year, with career-related and personal development support following alongside more traditional classes? It may be worth exploring possibilities for extending important areas of learning - such as work experience - from Transition Year to other grade levels for the benefit of students who do not have the opportunity to take part in the full year. However, in considering any such options, it should be remembered that perhaps the key distinguishing characteristic of all TY programmes is the extended space and time that it affords students to develop their own skills and interests in the absence of high-stakes pressure. For these reasons, the full impact of TY is unlikely to be easily replicable outside the ring-fenced setting of a standalone programme.
- 6) The rollout of the revised junior cycle which stresses more active learning methods, formative assessment, the development of short courses, and a greater focus on wellbeing (DES, 2015b) could usefully tap into the wealth of professional expertise that has been amassed by Transition Year coordinators and teachers since the

programme's foundation, and particularly since its expansion in the 1990s. For example, experienced TY coordinators could provide professional support to teachers of junior cycle classes with regard to the creation of short courses and the use of teaching and assessment methods that have traditionally been more commonly-found in TY classes. Future reforms should examine linkages between the revised junior cycle, Transition Year, and the rest of the senior cycle with a view to maintaining a coherent and holistic educational philosophy throughout all years of post-primary education.

7) This study, and others, have highlighted several areas in which further information is urgently needed on if, how, and to what extent the Transition Year aims are being achieved in practice. These include the need for greater detail on the social and personal outcomes associated with participation, on the characteristics of effective TY programmes, and on possible associations between TY outcomes and academic achievement. Some suggestions for study are given in Section 7.5, below. The Department of Education and Skills and other relevant agencies should commission ongoing research with the aim of enhancing our understanding of TY and making the reported benefits of the year available in the most effective manner to as many students as possible.

7.4 Limitations

In considering the points made above, some limitations to the study should be noted. Several broad conceptual issues surrounding the evaluation of TY are outlined first, followed by some specific points relating to the empirical study presented here.

7.4.1 Conceptual ambiguities in evaluating Transition Year

The unique nature of Transition Year – both within Irish educational settings (Section 1.1) and in international terms (Section 1.5) – presents a number of conceptual and technical challenges to the researcher. These challenges frame the limitations to the current study, which was designed to address only some of the possible questions – chief among which was the issue of how best to assess the programme, including what to measure, and how.

Given TY's status as a school-based programme, there may be a temptation to prioritise alternative indicators, such as cognitive, academic, or classroom behavioural outcomes, in assessing the programme. For example, promotional publications relating to the programme often refer to the superior performance of Transition Year students in the Leaving Certificate (Jeffers, 2007a). However, the original rationale and the official aims set for the Transition Year programme (ASTI, 1993, 1994; Dept. of Education, 1993) make it clear that its primary *raison d'être* is to support and enhance students' social and personal development. The explicit positioning of the programme in this way – in direct contrast to the more academic emphasis of other grade levels – makes it apparent that directly assessing psychosocial outcomes with reference to programme participation, at the student level, is a valid and worthwhile endeavour. The approach underlying this thesis was that detailed information on psychosocial indicators relating to students' personal and social development, and their interaction as individuals within a social environment, are key to understanding and evaluating the Transition Year programme in concept and in practice. For this reason, psychosocial outcome measures, which had been underutilised in previous assessments of TY, were prioritised here over other indicators. However, a follow-on study linking students' Leaving Certificate achievement to the other measures discussed here may be possible at a later stage (see Section 7.5).

Given that 'TY is intended as a space in which students are permitted – even encouraged – to "stand and stare" (Burke, 1974) and to mature in the absence of examination pressure, the question of the 'ownership' of maturity arises (using *maturity* here in its broad, everyday sense). That is, to what extent can students be 'led' to maturity by their teachers and other adults, and to what extent must students actively 'create' or nurture their own maturity through participation in TY? The need for students to actively engage with the novelties of the extra year in order to enhance their personal development has been highlighted by teachers and students alike:

It's not fair, they don't put in anything and then they say this is boring... they don't get stuck in. It's going to be boring if you are going to be just sitting there every day.

(TY student speaking about her classmates, quoted in Jeffers, 2007a, p. 50)

They miss the point that what they bring to the course is 'themselves'. The course allows failure but the pupils react to 'failure' rather than learn from it.

(Teacher quoted in Jeffers, 2007a, p. 99)

In this sense, Transition Year is intended as a constructivist experience, with students actively shaping the nature and extent of their own participation in the programme, and the associated personal development. However, the interactions between a student and their

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teachers, parents and peers are complex. This may be true to an even greater extent in Transition Year than in other grade levels, where daily exchanges and medium-term pathways through the academic year are more tightly demarcated. Although this study aimed to contribute to the discussion on Transition Year by investigating student engagement, among other outcomes, it was not designed to untangle the intricate web of daily communication and decision-making that constitute a student's ongoing motivation and the nature of their interactions with school, teachers, and peers.

This thesis was primarily focused on assessing a range of psychosocial *outcomes* at particular points, rather than on developmental *processes*. That is, the study did not aim to set out a complete model of how maturity develops throughout Transition Year. It is important to acknowledge that the perspective underpinning this thesis is that the development of maturity in adolescence is an ongoing, dynamic process rather than a simple developmental stage to be passed through. It is difficult, and probably unhelpful, to try to identify a straightforward endpoint of development at which someone may be classed as 'adult' (and before which they are 'child'). Students⁴⁶ mature and develop at different rates and at different times throughout their adolescent years, and this is the case with or without their participation in Transition Year. In this regard, the 'transition' evoked by the name of the programme is considered here to be a process of gradual growth and deliberate expansion of horizons, rather than a point of transition from something to something else. This developmental growth, aiming for eventual full participation in adult society, may be considered as

... a never-completed maturing. It is not a plateau of age but the asymptote of life's developmental curve. The individual can become more and more of an adult, but there is no guarantee that ageing automatically brings with it maturity as understood normatively.

(Archard, 1993, p. 36, on 'adulthood')

With this in mind, it is clear that the goals of the TY programme cannot be evaluated on the basis on the number of students who cross an arbitrary psychological line by 'becoming mature' during the extra year. The unique purpose of Transition Year is that it

⁴⁶ This, of course, also applies to non-students, although they do not feature in the inherently school-based sample that was the focus of this study.

provides students with accelerated opportunities to interact with the adult world and to take on more adult responsibilities, while remaining within the context of school and adult supervision. Other social contexts also play important roles in adolescent development – the home environment, peer groups, and extracurricular activities, for instance. However, as the focus of this study was the Transition Year programme, it was the relative contribution of Transition Year participation to students' development that was of interest.

Following from this, a final point of ambiguity relates to the issue of appropriate methods of assessing the ongoing process of maturation in adolescence. Likert-style questionnaire responses such as those used in this survey necessarily represent a person's view of themselves (on a particular characteristic, or with reference to a particular statement) at a single point in time. The use of questionnaire data – given its static nature – may therefore seem to be somewhat at odds with the idea of a changing, or developing, maturity. While acknowledging this apparent tension between the concept of ongoing development and the chosen methodology, it is important to note that the primary goal of this study was to make a first examination of the *extent* of changes in students' psychosocial development over a clearly-defined timespan. Previous research (Jeffers, 2007a; Smyth et al., 2004) has made it clear that positive changes in personal and social development are found among many students who take part in Transition Year. What was less apparent from these studies was the extent of such changes and how they relate to other characteristics of the student.

The use of questionnaires in this study sought to address these questions by facilitating the collection of a rich set of comparable data from a large sample of students, incorporating both quantitative and qualitative components. Although the representation of the dynamic process of maturation was necessarily limited somewhat by the instruments used, this constraint was offset by the fact that this method also provided an efficient and reliable way to collect large quantities of longitudinal data, which have provided a detailed view of students' changing perceptions of their own development at particular points over several years.

7.4.2 Limitations in implementation

Although quite detailed data were gathered from students for this study, there is no equivalent data from Transition Year coordinators or other teachers in the participating schools, nor from students' parents. Similarly, school-level information is limited to broad categories (e.g., school type, compulsory vs optional TY). For this reason, the findings discussed above rely heavily on students' perceptions, attitudes, and reports of the year as

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reported via a written questionnaire. In relation to students' self-generated opinions on TY, only a subsample of responses (albeit a large one; almost 1000 students) were selected for discussion. Corresponding information from other sources, particularly teachers, would help to cross-validate and complement these results. For example, interactions between students' attitudes, TY coordinators' attitudes and ideas for the programme, and levels of enthusiasm for the novel approaches of TY among the wider teaching staff could be explored. In addition, coordinators' responses to the feedback of students about TY in their own school would also help to contextualise especially strong criticism and praise.

It is clear from previous research and from students' ratings here that there are substantial differences between schools in what makes the Transition Year programme and how well the programme is received. Although the loss of ten schools to non-participation following sampling did not appear to negatively affect the representativeness of the student sample to a significant degree (see Chapter 3), it did reduce the options for examining between-school differences in student outcomes. That is, because only 20 schools took part in this study, it was not possible to reliably measure school differences in psychosocial outcomes using multilevel modelling (MLM) techniques. MLM goes beyond the correction for clustering that was used in the latent growth models by making it possible to explicitly separate out school-level effects from student-level effects. The main restriction in the use of MLM is the number of level-2 units (clusters/schools), rather than the number of level-1 units (individual participants) (Snijders & Bosker, 2012). It has been suggested that 20 clusters is sufficient as a lower bound for multilevel modelling (Bland, 2010), but to be safe at least 30-50 clusters, and in some cases closer to 100, are recommended by other researchers (Hox, 1997; Maas & Hox, 2005). Initial attempts were made to specify a multilevel growth curve model with random slopes (estimating variation in patterns of development between schools) using the current data, but the models would not converge reliably due to having too few clusters. This should be followed up by future research with a more extensive sample of schools, including more small schools. Small schools, which were relatively underrepresented here, often face difficult choices as to whether running TY at all, or alongside other programmes such as LCA, is feasible given their resources and staffing levels (Jeffers, 2002). The issues faced by students, principals, and (potential) TY coordinators in such cases - and how they may differ from those of larger schools - are worthy of more detailed investigation.

With regard to outcome measurement, it is worth noting that all of the scales used to measure the psychosocial outcome variables were originally developed for use in other countries, in most cases the US (with the exception of the PISA school engagement and school legacy scales, which were developed for an international consortium that included Ireland). Although these scales were selected, in part, on the basis of their demonstrated conceptual and psychometric validity and reliability in previous research, some (e.g., subjective age) had never been reported in the Irish context before this study. Therefore, although internal consistency in each case was found to be acceptable here, further validation of the measures would help to more fully determine construct validity and psychometric properties in relation to Irish users.

Finally, the longitudinal element of this study extended to three waves of data collection, with follow-ups taking place one year and two years from students' initial participation. For students who took part in TY, this took them to the end of Fifth Year. For those who skipped TY, the final wave occurred at the end of Sixth Year. It is possible that some effects associated with TY participation may show up more clearly in subsequent years and so would not be captured by the current study. For example, might the skills learned and experience gained during Transition Year leave participants better-prepared for leaving home after finishing second-level education, or for third-level study? Additional waves of data that could be linked to earlier information would allow a clearer examination of patterns of development over time, and the possibility of particularly important transition points before or after which a positive impact is more likely.

7.5 Further study

This study has contributed to the literature on the Transition Year programme by providing a first quantitative examination of the social and personal outcomes associated with participation, together with a comparison of the quantitative measures against participants' contemporaneous qualitative perceptions of development. The initial questions around student development in Transition Year have been addressed by examining patterns of change at the population level, having controlled for baseline characteristics. In future, there are several ways in which these findings could be extended, including further use of the existing longitudinal dataset created for this study, additional studies that would provide complementary information, and broader analysis of socioemotional development among adolescent students in Ireland. Some suggestions for future study are made below.

7.5.1 Secondary analysis of the longitudinal dataset

The latent growth models (LGM) reported here provided a necessary first step by describing overall patterns of development related to TY participation for a range of outcome measures.

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There are several ways in which the existing dataset could be used to clarify the follow-on questions raised by these models by examining the extent of developmental change from differing perspectives. For example, the possibility that Transition Year participation is particularly impactful for certain types of students but less so for others (thus potentially contributing to the non-significance of average group-level effects in the existing latent growth models) could be addressed through a *latent class growth analysis* (LCGA). In contrast to the variable-centred LGM approach, where covariates are used to explain changes in a single outcome variable, LCGA is a person-centred approach that uses covariates and one or more outcome measures together in order to see if a small number of clusters, or profiles, of students can be identified. Members of a given cluster behave similarly to each other, but are distinct in defined ways from members of other clusters. LCGA is an extension of the more traditional cluster analysis and can incorporate longitudinal measurements of change over time, meaning that students can be classified in terms of changes over time as well as initial characteristics. Muthén and Muthén (2000), Lanza et al. (2010), and Sturge-Apple, Davis and Cummings (2010) present accessible examples of applied LCGAs.

A more direct extension of the existing LGMs for all students could be achieved by integrating growth curves for two or more of the psychosocial outcome measures into one growth model and examining relationships between their paths of development over time. This is known as *multivariate growth curve modelling* (MGCM) or *parallel process modelling* (PPM). Significant variation in individual students' growth curves (as shown by the residual variance factor) was found for almost all outcome measures, and one way to account for this variation is to examine the relationships between variables. For example, do changes in relationships with teachers predict changes in school belonging and subjective age (perceived maturity)? Are changes in self-reliance and subjective age interrelated? An example of MGCM in action is given by Wang et al. (2015), who relate initial levels and changes over time for symptoms of depression to initial levels and changes over time for measures of school engagement and school burnout.

Propensity score matching offers an alternative method of looking at treatment effects that could be used to compare the developmental outcomes of TY participants and non-participants. This would represent a direct re-examination of the latent growth models from another perspective. Propensity scores were developed as a way to draw stronger causal inferences from observational data by finding comparable pairs of participants in each group (such as TY vs non-TY) so that the complete set of pairs can be treated as though all participants were assigned randomly to either condition, thereby simulating a true experiment

(Rosenbaum & Rubin, 1983). Stronger inferences may be supported by such post-hoc randomisation, although they remain restricted to the available data and must be tempered by any possibility of other plausible explanations for observed relationships, as well as the underlying need for a strong theoretical rationale for directly causal claims (cf. Aussems, Boomsma & Snijders, 2011; Pearl, 2012). One disadvantage to using propensity scores is that relatively few students will match closely enough to counterparts in the other group, so data from many (unmatched) students is ignored. However, considering the significant initial differences that were found between TY participants and non-participants for several outcome measures, it may be worthwhile to look more closely at the effects of TY participation on a subset of students who resembled each other very closely in Third Year, and their development over the following years. This exemplifies one of the key differences between examining outcomes via propensity score matching as opposed to via regression coefficients (as is the case with the LGMs): regression techniques model relationships between covariates and an outcome measure, whereas propensity scores model relationships between covariates and group membership (TY or non-TY) (Schafer & Kang, 2008). In this sense the underlying idea is similar to the logistic regression models predicting TY participation that are presented in Chapter 4, but propensity matching goes further by using this information to match specific students in either group before proceeding to further analyses (e.g., LGM) with the reduced and 'randomly-assigned' dataset. User-friendly introductions to the uses of propensity scores and comparisons with regression techniques are given by Fan and Nowell (2011), Domingue and Briggs (2009), and Zanutto (2006).

Finally, looking beyond Transition Year-specific analyses, it may be noted that the wealth of data available here constitutes one of the largest existing datasets on adolescent psychosocial development and wellbeing in Ireland. The responses given to more than 9000 questionnaires, returned from almost 5500 individual students, provide longitudinal data on a range of socioemotional indicators as well as background characteristics, attitudes and aspirations, and homework and study behaviours. Spanning all grade levels from Third Year to Sixth Year, there is potential for examining factors both within and outside school that are associated with adolescent socioemotional development in the Irish context more generally. The literature reviews given in Chapter 1 and Chapter 2 suggest some of the ways in which the information arising could add useful contributions to the international psychological and educational literature, and to policy development in Ireland.

7.5.2 Associations with Leaving Certificate performance

In addition to the psychosocial outcomes discussed so far, a final major topic of interest is the nature and extent of the documented association between Transition Year participation and preparation for the Leaving Certificate. Although the Guidelines (Dept. of Education, 1993) are very clear that the "Transition Year programme is NOT part of the Leaving Certificate" (emphasis in the original), the evidence shows that students who take part in Transition Year achieve at a higher average level in the Leaving Certificate than students who do not go through TY (Millar & Kelly, 1999; Smyth et al., 2004). Previous studies have not been able to unpick this association in relation to the other reported outcomes of TY participation.

The collection of longitudinal psychosocial data in this study offers a unique opportunity to examine the relationship between TY and Leaving Certificate performance in greater detail. With this in mind, an additional page was included at the end of the questionnaire given to participating students in Wave 1 (2011). Although outside the scope of the main PhD research, the page (headed 'Follow-on study') informed students that the Educational Research Centre would like to be able to consider the information given in the rest of the questionnaire in relation to their academic achievement, with a reminder that no-one would be identified individually. Students were asked to respond to one of two explicit options:

- If you <u>agree to allow</u> the Educational Research Centre to confidentially access your Junior Certificate / Leaving Certificate results for research purposes, please tick here.
- If you <u>do not allow</u> the Educational Research Centre to confidentially access your Junior Certificate / Leaving Certificate results for research purposes, please tick here.

(bolding and underline in original)

Following this, 2240 students (55%) chose the first option and explicitly gave permission to access to their examination results. About 19% (763 students) chose the second option, explicitly refusing access. Amongst the remaining students, <1% (17 students) chose both options or made an unclear choice, and 25% of students left the page blank. The latter two groups are considered to have implicitly refused access to their examination results. In terms of participation by grade level, 49% of Third Year, 58% of Transition Year students, and 62% of Fifth Year students explicitly opted to allow access to their examination results for additional study. Only the students who explicitly gave consent to this follow-on research were included in a separate, password-protected file of ID codes, which was maintained separately to the main data file of questionnaire responses.

The State Examinations Commission, the statutory body responsible for operating the JCE and LCE examinations, have been contacted in relation to these students and have indicated their support for the proposed study. By linking students' academic achievement (Junior Certificate and Leaving Certificate results) to the psychosocial measures examined here (e.g., school engagement, perceived competence, school satisfaction), students' homework and study behaviours, and relevant background information (e.g., parental education, educational aspirations, gender), the nature of the known association between participation in Transition Year and stronger Leaving Certificate performance may become clearer.

7.5.3 Topics for additional future study

The data collected here provide a detailed outline of the student experience of TY. However, without contemporaneous information from teachers it is impossible to know how closely students' views correspond to teacher reports of their TY programme or how much disagreement there may be. For example, would teachers in schools where students' comments imply low teacher interest in TY actually report more negative attitudes to the programme? Or might it be the case that a teacher with positive attitudes towards the programme but who uses traditional teaching methods with TY class groups is perceived negatively by students?

As reported here and elsewhere (Jeffers, 2007a; Smyth et al., 2004), teaching practices in Transition Year classrooms and teachers' relationships with their students are important factors in how students regard their time in TY, and it would be worthwhile to gather data on teachers' attitudes and practices in order to examine their relationship with student outcomes. As well as seeking the personal views of individual teachers within schools, school principals and TY coordinators could be asked about the content, organisation, teaching support, and other structural aspects of their school's TY programme, as well as about their own background and perspectives on Transition Year. This would have the additional benefit of updating and expanding on the information given by Smyth et al. (2004), which was based on the 2000/01 academic year. Considering the changes in provision and uptake of the programme since their data were gathered, it would be constructive to examine changes that may have occurred in the meantime. For example, neither the DES nor the PDST collect information on the compulsory or optional nature of TY programmes (E. Herlihy, PDST, personal communication, 27 January 2016; H. Maxwell, DES, personal communication, 28 January 2016), meaning that we do not know whether Smyth et al.'s estimate that one-quarter of TY programmes are compulsory is still accurate.

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Ideally, a survey of this nature would be combined with a collection of student outcomes in participating schools. Both teachers and students could be asked to provide information focused on priority indicators, with follow-up surveys of the students in order to examine changes over time in relation to teacher characteristics. If this were done systematically at key points of the year (e.g., beginning and end) in enough schools, it would produce a much-needed resource for examining interactions between students' socioemotional outcomes, teacher attitudes and practices, and how both relate to the implemented TY programme. This approach could also provide a platform for more focused modules within the TY timetable aimed at the development of specific skills and character strengths and their application to real life situations (see Macaskill and Denovan, 2013, for an example of an intervention of this nature with undergraduate students).

Future research could also go beyond the short-term longitudinal outcomes reported here by following students over a longer time period – both backwards, to earlier ages, and forwards to the end of secondary school and into early adulthood. Examination of nonlinear patterns of development, such as curvilinear growth, require at least four (and ideally more) waves of data for full model specification. Although the extant international research provides some indications as to what may be expected at different age groups, a broader view of social and personal development in Ireland would help to place the impact of the Transition Year programme in context. The Growing Up in Ireland (GUI) study may, in time, begin to fulfil this function. The most recent wave of GUI involved children at 13 years old, and it is currently planned to revisit these participants in future waves at 17 and 20 years of age (www.growingup.ie).

Finally, as noted above, this study was the first quantitative examination of changes over time in psychosocial outcomes with Transition Year participation. Further quantitative evidence regarding the effectiveness of the TY programme is needed. Future studies could seek to replicate the findings reported here and include a broader range of indicators. For example, more information on the development of metacognitive and self-regulating behaviours during Transition Year would be useful (cf. Dent & Koenka, in press). Individual differences in personality may also play a role in how students engage with the opportunities offered by TY, and whether they access these opportunities to the fullest extent. In addition, TY students' extra-curricular activities and any paid work outside school are relevant factors worth considering for their contribution to students' personal development, and have received relatively little attention to date. Such studies should expand the evidence base by including alternative measures of positive development and other indicators of wellbeing and preparedness for life. They should involve a minimum of 30-50 schools – ideally more – so that school-level effects can be examined and stronger inferences drawn about the characteristics of effective Transition Year programmes.

7.6 Epilogue

To end the chapter, it is worth reiterating that no other educational system in the world is known to systematically prioritise social and personal development in mid-adolescence to the extent that the Irish system does through Transition Year. This unique standing underlines the fact that the longevity of the TY initiative – in existence for more than 40 years so far – was not inevitable. Nor should its place in the Irish educational discourse, its popularity among students, or its continuing expansion be taken for granted. Jeffers (2015, p. 1) describes the experience of hosting a workshop as recently as the mid-1990s where he, as a member of the newly-formed Transition Year Support Service, was told by a group of teachers that "this Transition Year thing" would never catch on because it was "far too idealistic." Even amongst its critics, it is difficult to imagine the programme – involving nearly 40,000 students in most schools around the country every year – being dismissed so summarily nowadays.

Worldwide, at present, there is a growing focus on positive education and youth development as well as increasing assessment of child and adolescent wellbeing, socioemotional development, and non-cognitive factors that affect learning (e.g., Diamond, 2015; Ikesako & Miyamoto, 2015; Levin, 2012; Rusk & Waters, 2013; Stankov & Lee, 2014; White, 2016; White & Waters, 2015). In Ireland, the revised framework for the reformed junior cycle explicitly aspires to enhancing wellbeing and devotes substantial time to teaching wellbeing, life-skills and connectedness among junior cycle students (DES, 2015b). In the midst of this renewed emphasis on youth development beyond academic outcomes, Ireland can offer a successful working example of a large-scale, widely-accessed, long-established programme for social and personal development that is already well-integrated as part of the mainstream education system. Interested parties should take an active role in rigorously assessing the processes and outcomes of Transition Year, and in putting Ireland's experience with TY forward as a model that could be adapted or emulated in other contexts.

- Abdi, H. (2010). Holm's sequential Bonferroni procedure. In N. Salkind (Ed.), *Encyclopaedia of Research Design*. Thousand Oaks, CA: Sage Publications.
- Acock, A. (n.d.). Growth curves and extensions using MPlus. Retrieved 10 July 2015 from http://people.oregonstate.edu/~acock.
- Aiken, L. & West, S. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Alexander, K., Entwisle, D., & Olson, L. (2007). Lasting consequences of the summer learning gap. *American Sociological Review*, 72, 167-180.
- Alliance for Excellent Education. (2009). The high cost of high school dropouts: What the nation pays for inadequate high schools. Washington, DC: Author.
- Altman, D.G. & Bland, J. M. (1995). Statistics notes: The normal distribution. *British Medical Journal*, 310, 298.
- Anderson, S. L. & Betz, N. E. (2001). Sources of social self-efficacy expectations: Their measurement and relation to career development. *Journal of Vocational Behavior*, 58, 98-117.
- Antaramian, S. P., Huebner, E.S., & Valois, R. F. (2008). Adolescent life satisfaction. *Applied Psychology: An International Review*, 57, 112-126.
- Appleton, J., Christenson, S., & Furlong, M. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45, 369-386.
- Appleton, J., Christenson, S., Kim, D. & Reschly, A. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. *Journal* of School Psychology, 44, 427-445.
- Arbeau, K. J., Galambos, N. L., & Jansson, S. M. (2007). Dating, sex, and substance use as correlates of adolescents' subjective experience of age. *Journal of Adolescence*, 30, 435-447.
- Archambault, I., Janosz, M., Fallu, J., & Pagani, L. (2009). Student engagement and its relationship with early high school dropout. *Journal of Adolescence*, 32, 651-670.
- Archard, D. (1993). Children: Rights and childhood. London: Routledge.
- Arnett, J. J. (2001). Conceptions of the transition to adulthood: Perspectives from adolescence through midlife. *Journal of Adult Development*, 8, 133-143.
- ASTI [Association of Secondary Teachers, Ireland]. (1993). The Transition Year. Dublin: ASTI.
- ASTI [Association of Secondary Teachers, Ireland]. (1994). *Transition Year Option: A teacher's handbook*. Dublin: ASTI.
- ASTI [Association of Secondary Teachers, Ireland]. (2012). Impact of austerity measures on secondlevel schools: Survey of school principals. Dublin: ASTI/Millward Brown Lansdowne.
- Aussems, M., Boomsma, A., & Snijders, T. (2011). The use of quasi-experiments in the social sciences: A content analysis. *Quality and Quantity*, 45, 21-42.

- Axford, N., Hobbs, T., & Jodrell, J. (2013). Making child well-being data work hard: Getting from data to policy and practice. *Child Indicators Research*, 6, 161-177.
- Baird, J., Hopfenbeck, T., Elwood, J., Caro, D., & Ahmed, A. (2014). Predictability in the Irish Leaving Certificate. Oxford: University of Oxford.
- Baker, J., Derrer, R., Davis, S., Dinklage-Travis, H., Linder D., & Nicholson, M. (2001). The flip side of the coin: Understanding the school's contribution to dropout and completion. *School Psychology Quarterly*, 16, 406-426.
- Baker, J., Lilly, L., Aupperlee, J. & Patial, S. (2003). The developmental context of school satisfaction: Schools as psychologically healthy environments. *School Psychology Quarterly*, 18, 206-221.
- Bandalos, D. L. (2008). Is parceling really necessary? A comparison of results from item parceling and categorical variable methodology. *Structural Equation Modeling: A Multidisciplinary Journal*, 15, 211-240.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. New Jersey: Prentice-Hall.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117-148.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of Psychology*, 52, 1-26.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, 31, 143-164.
- Bandura, A. (2006a). Adolescent development from an agentic perspective. In F. Pajares & T. Urdan (eds.). Self-efficacy beliefs of adolescents (pp. 1-43). Greenwich, CT: Information Age Publishing.
- Bandura, A. (2006b). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1, 164-180.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364-374.
- Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and social Psychology*, 76, 258-269.
- Barak, B. (2009). Age identity: A cross-cultural global approach. *International Journal of Behavioral Development*, 33, 2-11.
- Barker, E. T. & Galambos, N. L. (2005). Adolescents' implicit theories of maturity: Ages of adulthood, freedom, and fun. *Journal of Adolescent Research*, 20, 557-576.
- Barnette, J. (2000). Effects of stem and Likert response option reversals on survey internal consistency: If you feel the need, there is a better alternative to using those negatively worded stems. *Educational and Psychological Measurement*, 60, 361-370.

- Barrett, P. (2007). Structural equation modelling: Adjudging model fit. *Personality and individual Differences*, 42, 815-824.
- Beal, S. & Crockett, L. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Developmental Psychology*, 46, 258-265.
- Beaton, A., Zwick, R., Yamamoto, K., Mislevy, R., Johnson, E. & Rust, K. (1990). The effect of changes in the National Assessment: Disentangling the NAEP 1985-1986 reading anomaly (Report No. 17TR21). Princeton, NJ: National Assessment of Educational Progress, Educational Testing Service.
- Becker, B. & Luthar, S. (2002). Social-emotional factors affecting achievement outcomes among disadvantaged students: Closing the achievement gap. *Educational Psychologist*, 37, 197-214.
- Ben-Arieh, A. (2009). Indicators of children well-being: trends, status and perspectives for the future. In ChildON Europe Secretariat (Ed.), *The on-going debate on the assessment of children's conditions of life: The proceedings of the ChildON Europe seminar on child well-being indicators* (pp. 5-8). Florence: Istituto degli Innocenti. Retrieved 14 November 2012 from <u>http://www.childoneurope.org/issues/publications.htm</u>.
- Bergin, C. & Bergin, D. (2009). Attachment in the classroom. *Educational Psychology Review*, 21, 141-170.
- Biesta, G. (2009). Good education in an age of measurement: on the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21, 33–46.
- Bilgin, M. & Akkapulu, E. (2007). Some variables predicting social self-efficacy expectation. *Social Behavior and Personality*, 35, 777-788.
- Bland, J. (2010). The analysis of cluster-randomised trials in education. *Effective Education*, 2, 165-180.
- Bland, M. & Altman, D. (2000). Statistics notes: The odds ratio. British Medical Journal, 320, 1468.
- Bland, J. & Kerry, S. (1997). Statistics notes: Trials randomised in clusters. *British Medical Journal*, 315, 600.
- Bollen, K. & Curran, P. (2006). Latent curve models: A structural equation perspective. New Jersey: Wiley.
- Borsboom, D., Mellenbergh, G., & van Heerden, J. (2003). The theoretical status of latent variables. *Psychological Review*, 110, 203-219.
- Bradshaw, J. (2009). A comparison of child well-being in the EU29. In ChildON Europe Secretariat (Ed.), The on-going debate on the assessment of children's conditions of life: The proceedings of the ChildON Europe seminar on child well-being indicators (pp. 9-18). Florence: Istituto degli Innocenti. Retrieved 14 November 2012 from <u>http://www.childoneurope.org/issues/publications.htm</u>.
- Bradshaw, J. & Richardson, D. (2009) An index of child well-being in Europe. *Child Indicators Research*, 2, 319-351.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

- Braun, V. & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. London: Sage.
- Brooks, A. & Hanafin, S. (2005). Measuring Child Well-Being: An Inventory of Key Indicators, Domains and Indicator Selection Criteria to Support the Development of a National Set of Child Well-Being Indicators. Dublin: Stationery Office.
- Browne, M. & Cudeck, R. (1992). Alternative ways of assessing model fit. Sociological Methods & Research, 21, 230-258.
- Burke, R. (1974). Address to the Regional Meeting of the Dublin Education Council for Secondary Schools. Synge St CBS, Dublin. 2 December 1974.
- Burke, R. (2015). Address to the Learning from Transition Year' seminar. National University of Ireland, Maynooth. 6 October 2015.
- Burnham, K. & Anderson, D. (2004). Multimodal inference: Understanding AIC and BIC in model selection. *Sociological Methods & Research*, 33, 261-304.
- Byrne, B. (2012). *Structural equation modeling with Mplus: Basic concepts, applications and programming.* New York: Routledge.
- Byrne, D. & Smyth, E. (2010). No way back? The dynamics of early school leaving. Dublin: ESRI/Liffey Press.
- Byrne, D. & Smyth, E. (2011). Behind the scenes: A study of parental involvement in post-primary education. Dublin: ESRI/Liffey Press.
- Caprara, G. & Steca, P. (2005a). Affective and social self-regulatory efficacy beliefs as determinants of positive thinking and happiness. *European Psychologist*, 10, 275-286.
- Caprara, G. & Steca, P. (2005b). Self-efficacy beliefs as determinants of prosocial behaviour conducive to life satisfaction across ages. *Journal of Social and Clinical Psychology*, 24, 191-207.
- Caprara, G., Steca, P., Cervone, D., & Artistico, D. (2003). The contribution of self-efficacy beliefs to dispositional shyness: On social-cognitive systems and the development of personality dispositions. *Journal of Personality*, 71, 943-970.
- Carifio, J. & Biron, R. (1982). Collecting sensitive data anonymously: Further findings on the CDRGP technique. *Journal of Alcohol and Drug Education*, 27, 38-70.
- Carini, R., Kuh, G., & Klein, S. (2006). Student engagement and student learning: testing the linkages. *Research in Higher Education*, 47, 1-32.
- Carpenter, J. & Plewis, I. (2011). Analysing longitudinal studies with non-response: Issues and statistical methods. In: Williams, M. and Vogt, P, (Eds.) *The SAGE handbook of Innovation in Social Research Methods* (pp. 498-523). New York: SAGE.
- Carter, S. & O Cairbre, F. (2011). A study of the benefits of using the history of mathematics in Transition Year. In T. Dooley, M Corcoran and M. Ryan (Eds.), *Proceedings of the Fourth Conference on Research in Mathematics Education, MEI4* (pp. 93-103). Dublin: St Patrick's College.
- Catalano, R., Berglund, M., Ryan, J., Lonczak, H. & Hawkins, J. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Annals of the American Academy of Political and Social Science*, 591, 98–124.
- Cauffman, E. & Steinberg, L. (1995). The cognitive and affective influences on adolescent decision-making. *Temple Law Review*, 68, 1763-1789

- Cauffman, E. & Steinberg, L. (2000). (Im)maturity of judgment in adolescence: Why adolescents may be less culpable than adults. *Behavioral Sciences and the Law*, 18, 741-760.
- Chang, L., McBride-Chang, C., Stewart, S., & Au, E. (2003). Life satisfaction, self-concept, and family relations in Chinese adolescents and children. *International Journal of Behavioral Development*, 27, 182-189.
- Chapman, R., Buckley, L., Sheehan, M., & Shochet, I. (2013). School-based programs for increasing connectedness and reducing risk behaviour: A systematic review. *Educational Psychology Review*, 25, 95-114.
- Cheng, H. & Furnham, A. (2002). Personality, peer relations, and self-confidence as predictors of happiness and loneliness. *Journal of Adolescence*, 25, 327-339.
- Cheon, S. & Reeve, J. (2015). A classroom-based intervention to help teachers decrease students' amotivation. *Contemporary Educational Psychology*, 40, 99-111.
- Cheung, G. & Rensvold, R. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9, 233-255.
- Choi, K., Seltzer, M., Herman, J. & Yamashiro, K. (2004). Children Left Behind in AYP and Non-AYP Schools: Using Student Progress and the Distribution of Student Gains to Validate AYP. Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing, UCLA.
- Clerkin, A. (2012). Personal development in secondary education: The Irish Transition Year. *Education Policy Analysis Archives, 20 (38).* Retrieved 1 December 2012 from <u>http://epaa.asu.edu/ojs/article/view/1061/1022</u>.
- Clerkin, A. (2013). Growth of the 'Transition Year' programme, nationally and in schools serving disadvantaged students, 1992-2011. *Irish Educational Studies*, 32, 197-215.
- Clerkin, A. (2015). 'It's ok not to be ok'': Evaluation of St Patrick's Mental Health Services Transition Year programme. Dublin: St Patrick's Mental Health Services.
- Clerkin, A. & Creaven, A-M. (2013). Pupil engagement. In E. Eivers & A. Clerkin (eds.) *National Schools, international contexts: Beyond the PIRLS and TIMSS test results* (pp. 33-54). Dublin: Educational Research Centre.
- Coetzee, M. & Bester, S. (2009). The possible value of a gap year: A case study. *South African Journal of Higher Education*, 23, 608-623.
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.
- Cohen, J. (2006). Social, emotional, ethical, and academic education: Creating a climate for learning, participation in democracy, and well-Being. *Harvard Educational Review*, 76, 201-237.
- Coleman, J. (1972). How do the young become adults? Review of Educational Research, 42, 431-439
- Coleman, P. (2003). Perceptions of parent-child attachment, social self-efficacy, and peer relationships in middle childhood. *Infant and Child Development*, 12, 351-368.
- Collins, L. (2006). Analysis of longitudinal data: The integration of theoretical model, temporal design, and statistical model. *Annual Review of Psychology*, 57, 505-528.
- Connolly, J. (1989). Social self-efficacy in adolescence: Relations with self-concept, social adjustment, and mental health. *Canadian Journal of Behavioral Science, 21*, 258-269.

- Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66, 227-268.
- Cosgrove, J., Gilleece, L. & Shiel, G. (2011). *International Civic and Citizenship Study (ICCS): Report for Ireland.* Dublin: Educational Research Centre.
- Coyne, I. (2010). Research with children and young people: The issue of parental (proxy) consent. *Children & Society*, 24, 227-237.
- Crawford, C. & Cribb, J. (2012). Gap-year takers: Uptake, trends, and long term outcomes. Department of Education (UK) Research Report (DFE-RR252). London: Centre for the Analysis of Youth Transitions.
- Creed, P., Muller, J., & Patton, W. (2003). Leaving high school: the influence and consequences for psychological well-being and career-related confidence. *Journal of Adolescence*, 26, 295-311.
- Crooks, T. & McKernan, J. (1984). The challenge of change: Curriculum development in Irish postprimary schools 1970-84. Dublin: Institute of Public Administration.
- CSO [Central Statistics Office]. (2003). Census of Population 2002, Volume 4: Usual residence, migration, birthplaces and nationalities. Dublin: Stationery Office.
- CSO [Central Statistics Office]. (2012). *This is Ireland: Highlights from Census 2011, Part 1.* Dublin: Stationery Office.
- Cummins, R., Lau, A., Mellor, D., & Stokes, M. (2009). Encouraging governments to enhance the happiness of their nation: Step 1: Understand subjective wellbeing. *Social Indicators Research*, 91, 23-36.
- Cutler, D. & Lleras-Muney (2006). *Education and health: Evaluating theories and evidence* (NBER working paper W12352). Cambridge, Mass.: National Bureau of Economic Research.
- Curran, P. & Bauer, D. (2007). Building path diagrams for multilevel models. *Psychological Methods*, 12, 283-297.
- Curran, P., Howard, A., Bainter, S., Lane, S., & McGinley, J. (2014). The separation of between-person and within-person components of individual change over time: A latent curve model with structured residuals. *Journal of Consulting and Clinical Psychology*, 82, 879-894.
- Curran, P. & Hussong, A. (2002). Structural equation modelling of repeating measures data: Latent curve analysis. In D. Moskowitz and S. Hershberger (eds.), *Modeling Intraindividual Variability with Repeated Measures Data: Methods and Applications* (pp. 59-86). New Jersey: Lawrence Erlbaum Associates.
- Curran, P. & Hussong, A. (2003). The use of latent trajectory models in psychopathology research. *Journal of Abnormal Psychology*, 112, 526-544.
- Curran, P. & Muthén, B. (1999). The application of latent curve analysis to testing developmental theories in intervention research. *American Journal of Community Psychology*, 27, 567-595.
- Curran, P., Obeidat, K., & Losardo, D. (2010). Twelve frequently asked questions about growth curve modelling. *Journal of Cognition and Development*, 11, 121-136.
- Curtis, D., Mlotkowski, P., & Lumsden, M (2012). Bridging the gap: Who takes a gap year and why? Adelaide: NCVER (National Centre for Vocational Educational Research).

- Dagenais-Desmarais, V. & Savoie, A. (2012). What is psychological well-being, really? A grassroots approach from the organizational sciences. *Journal of Happiness Studies*, 13, 659-684.
- Dalton, A. L. & Galambos, N. L. (2009). Affect and sexual behavior in the transition to university. Archives of Sexual Behavior, 38, 675-687.
- Damon, W. (2004). What is positive youth development? Annals of the American Academy of Political and Social Science, 591, 13–24.
- Darmody, M. & Byrne, D. (2006). An introduction to computerised analysis of qualitative data. *Irish Educational Studies*, 25, 121-133.
- Deane, K. L., Harré, N. & Moore, J. (2009). *Individual growth in a community-based youth development program.* Paper presented at 117th Annual Convention of the American Psychological Association, Toronto, Canada.
- Deci, E. & Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E., Vallerand, R., Pelletier, L., & Ryan, R. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 325-346.
- Dent, A. & Koenka, A. (in press). The relation between self-regulated learning and academic achievement across childhood and adolescence: A meta-analysis. *Educational Psychology Review*. DOI: 10.1007/s10648-015-9320-8.
- Department of Education. (1993). *Transition Year Programme: Guidelines for schools*. Dublin: Department of Education.
- Department of Education. (1995) *Charting our education future: White Paper on education*. Dublin: Stationery Office.
- Department of Education. (1996). Transition Year Programme, 1994-1995: An Evaluation by the Inspectorate of the Department of Education. Dublin: Department of Education.
- DES [Department of Education and Skills]. (2011). Literacy and numeracy for learning and life: The national strategy to improve literacy and numeracy among children and young people, 2011–2020. Dublin: Stationery Office.
- DES [Department of Education and Skills]. (2015a). Retention rates of pupils in second level schools: 2008 entry cohort. Dublin: Author.
- DES [Department of Education and Skills]. (2015b). Framework for Junior Cycle (2015). Dublin: Author.
- Desivily, H. & Eizen, D. (2005). Conflict management in work teams: The role of social selfefficacy and group identification. *The International Journal of Conflict Management*, 16, 183-208.
- Deslandes, R., Potvin, P., & Leclerc, D. (2000). Les liens entre l'autonomie de l'adolescent, la collaboration parentale et la réussite scolaire. *Revue canadienne des sciences de comportement*, 32, 208-217.
- Di Giunta, L., Eisenberg, N., Kupfer, A., Steca, P., Tramontano, C., & Caprara, G. (2010). Assessing perceived empathic and social self-efficacy across countries. *European Journal of Psychological Assessment*, 26, 77-86.
- Diamond, A. (2015). Research that helps us move closer to a world where each child thrives. Research in Human Development, 12, 288-294.

- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55, 34-43.
- Diener, E. (2009). Positive psychology: Past, present, and future. In C. Snyder and S. Snyder (eds.), *Oxford Handbook of Positive Psychology* (pp. 7-11). Oxford: Oxford University Press.
- Diener, E., Suh, E., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276-302.
- Dietrich, J., Parker, P., & Salmela-Aro, K. (2012). Phase-adequate engagement at the postschool transition. *Developmental Psychology*, 48, 1575-1593.
- Dilorio, C., Soet, J., Van Marter, D., Woodring, T., & Dudley, W. (2000). An evaluation of a self-generated identification code. *Research in Nursing & Health*, 23, 167-174.
- Dolan, P., Layard, R., & Metcalfe, R. (2011). *Measuring subjective well-being for public policy*. London: Office for National Statistics, UK.
- Domingue, B. & Briggs, D. (2009). Using linear regression and propensity score matching to estimate the effect of coaching on the SAT. *Multiple Linear Regression Viewpoints*, 35, 12-29.
- Dooley, B. & Fitzgerald, A. (2012). *My World Survey: National study of youth mental health in Ireland*. Dublin: Headstrong / UCD.
- Dorman, J. (2008). The effect of clustering on statistical tests: an illustration using classroom environment data. *Educational Psychology*, 28, 583-595.
- Duncan, T. & Duncan, S. (2009). The ABC's of LGM: An introductory guide to latent variable growth curve modeling. *Social and Personality Psychology Compass*, 3, 979-991.
- Duncan, T., Duncan, S., Strycker, L., Li, F., & Alpert, A. (1999). An introduction to latent variable growth curve modelling: Concepts, issues, and applications. New Jersey: Lawrence Erlbaum Associates.
- Durant, L., Carey, M., & Schroder, K. (2002). Effects of anonymity, gender, and erotophilia on the quality of data obtained from self-reports of socially sensitive behaviors. *Journal of Behavioural Medicine*, 25, 439-467.
- Durlak, J., Taylor, R., Kawashima, K., Pachan, M., DuPre, E., Celio, C., Berger, S., Dymnicki, A. & Weissberg, R. (2007). Effects of positive youth development programs on school, family, and community systems. *American Journal of Community Psychology*, 39, 269–286.
- Durlak, J., Weissberg, R., Dymnicki, A., Taylor, R., & Schellinger, K. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 405-432.
- Dworkin, J. B., Larson, R. & Hansen, D. (2003). Adolescents' accounts of growth experiences in youth activities. *Journal of Youth and Adolescence*, 1, 17-26.
- Eaker, D. & Walters, L. (2002). Adolescent satisfaction in family rituals and psychosocial development: A developmental systems theory perspective. *Journal of Family Psychology*, 16, 406-414.
- Eccles, J. & Wang, M. (2012). Commentary: So what is student engagement anyway? In S. Christenson, A. Reschly, & C. Wylie (eds.), *Handbook of research on student engagement* (pp. 133-145). New York: Springer.
- Egan, O., & O'Reilly, J. (1979). The Transition Year Project. Oideas, 20 (Spring), 49-59.

- Eisinga, R., te Grotenhuis, M., & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health*, 58, 637-642.
- Eivers, E., Clerkin, A., Millar, D. & Close, S. (2010). *The 2009 National Assessments technical report*. Dublin: Educational Research Centre.
- Eldridge, S., Ashby, D., Feder, G., Rudnicka, A., & Ukoumunne, O. (2004). Lessons for cluster randomized trials in the twenty-first century: a systematic review of trials in primary care. *Clinical Trials*, 1, 80-90.
- Elmore, G. & Huebner, E. (2010). Adolescents' satisfaction with school experiences: Relationships with demographics, attachment relationships, and school engagement behaviour. *Psychology in the Schools*, 46, 525-537.
- Ercikan, K. & Roth, W. (2006). What good is polarizing research into qualitative and qualitative? *Educational Researcher*, 35, 14-23.
- Esbensen, F., Deschenes, E., Vogel, R., West, J., Arboit, K., & Harris, L. (1996). Active parental consent in school-based research: An examination of ethical and methodological issues. *Evaluation Review*, 20, 737-753.
- Faden, V., Day, N., Windle, M., Windle, R., Grube, J., Molina, B., Pelham, W., Gnagy, E., Wilson, T., Jackson, K. & Sher, K. (2004). Collecting longitudinal data through childhood, adolescence, and young adulthood: Methodological challenges. *Alcoholism: Clinical and Experimental Research*, 28, 330-340.
- Fan, X. (2003). Power of latent growth modeling for detecting group differences in linear growth trajectory parameters. *Structural Equation Modeling: A Multidisciplinary Journal*, 10, 380-400.
- Fan, X. & Nowell, D. (2011). Using propensity score matching in educational research. *Gifted Child Quarterly*, 55, 74-79.
- Ferguson, C. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice*, 40, 532-538.
- Fidell, L. & Tabachnik, B. (2003). Preparatory data analysis. In J. Schinka, W. Velicer & I. Weiner (eds.), *Handbook of Psychology. Volume 2: Research Methods in Psychology* (pp. 115-141).
- Field, A. (2007). Kurtosis. In N. Salkind (Ed.), *Encyclopedia of Measurement and Statistics* (pp. 522-523). Thousand Oaks: Sage Reference.
- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics (4th edition)*. London: Sage Publications.
- Finn, J. D. (1989). Withdrawing from school. Review of Educational Research, 59, 117-142.
- Fitzpatrick, S., Twohig, M., & Morgan, M. (2014). Priorities for primary education? From subjects to life-skills and children's social and emotional development. *Irish Educational Studies*, 33, 269-286.
- Flannery, D. J., Rowe D. C., & Gulley, B. L. (1993). Impact of pubertal status, timing, and age on adolescent sexual experience and delinquency. *Journal of Adolescent Research*, 8, 21-40
- Fogle, L. M., Huebner E. S., & Laughlin, J. E. (2002). The relationship between temperament and life satisfaction in early adolescence: Cognitive and behavioural mediation models. *Journal of Happiness Studies*, 3, 373-392.

- Foster, E. & Bickman, L. (1996). An evaluator's guide to detecting attrition problems. *Evaluation Review*, 20, 695-723.
- Foust, R. C., Hertberg-Davis, H. & Callahan, C. M. (2009). Students' perceptions of the nonacademic advantages and disadvantages of participation in advanced placement courses and International Baccalaureate programs. *Adolescence*, 44, 289–312.
- Foy, P. (2004). Intraclass correlation and variance components as population attributes and measures of sampling efficiency in PIRLS 2001. Proceedings of the International Association for the Evaluation of Educational Achievement International Research Conference-2004. Amsterdam: IEA.
- Foy, P. & Joncas, M. (1999). TIMSS sample design. In M. Martin, K. Gregory, and S. Stemler (eds.), *TIMSS 1999 Technical Report*. Chestnut Hill, Massachusetts: International Study Centre, Boston College.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research, 74 (1),* 59-109.
- Fredrickson, B. L. (1998). What good are positive emotions? Review of General Psychology, 2, 300-319.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Freeney, Y. & O'Connell, M. (2012). The predictors of the intention to leave school early among a representative sample of Irish second-level students. *British Educational Research Journal*, 38, 557-574.
- Fuller, C. (2014). Social capital and the role of trust in aspirations for higher education. *Educational Review*, 66, 131-147.
- Furlong, M. J. & Christenson, S. L. (2008). Engaging students at school and with learning: A relevant construct for all students. *Psychology in the Schools*, 45, 365-368.
- Furrer, C. & Skinner, C. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95, 148-162.
- Galambos, N. L., Albrecht, A. K., & Jansson, S. M. (2009). Dating, sex, and substance use predict increases in adolescents' subjective age across two years. *International Journal of Behavioral Development*, 33, 32-41.
- Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents do matter: trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development*, 74, 578-594.
- Galambos, N.L., Barker, E.T., & Tilton-Weaver, L.C. (2003). Who gets caught at maturity gap? A study of pseudomature, immature, and mature adolescents. *International Journal of Behavioral Development*, 27, 253–263.
- Galambos, N. L., Darrah, J. & Magill-Evans, J. (2007). Subjective age in the transition to adulthood for persons with and without motor disabilities. *Journal of Youth and Adolescence*, 36, 825-834.
- Galambos, N. L., Kolaric, G. C., Sears, H. A., & Maggs, J. L. (1999). Adolescents' subjective age: An indicator of perceived maturity. *Journal of Research on Adolescence*, 9 (3), 309-337.
- Galambos, N. L. & Leadbeater, B. (2000). Trends in adolescent research for the new millennium. *International Journal of Behavioral Development*, 24, 289-294.

- Galambos, N. L., MacDonald, S., Naphtali, C., Cohen, A., & de Frias, C. (2005). Cognitive performance differentiates selected aspects of psychosocial maturity in adolescence. *Developmental Neuropsychology*, 28, 473-492.
- Galambos, N. L., Magill-Evans, J., & Darrah, J. (2008). Psychosocial maturity in the transition to adulthood for people with and without motor disabilities. *Rehabilitation Psychology*, 53, 498-504.
- Galambos, N.L. & Tilton-Weaver, L.C. (2000). Adolescents' psychosocial maturity, subjective age, and problem behaviour: In search of the adultoid. *Applied Developmental Science*, 4, 178–192.
- Galambos, N. L., Turner, P. K., & Tilton-Weaver, L. C. (2005). Chronological and subjective age in emerging adulthood: The crossover effect. *Journal of Adolescent Research, 20,* 538–556.
- Garner, H., Hayes, S., & Eilks, I. (2014). Linking formal and non-formal learning in science education a reflection from two cases in Ireland and Germany. *Sisyphus*, 2, 10-31.
- Garson, G. D. (2012). *Testing statistical assumptions*. North Carolina State University: Statistical Associates Publishing.
- Gavin, A., Molcho, M., Kelly, C., & Nic Gabhainn, S. (2013). The HBSC Ireland trends report 1998-2010: Child health behaviours, outcomes, and contexts. Galway: Department of Health/NUIG.
- Gavin, A., Keane, E., Callaghan, M., Molcho, M., Kelly, C., & Nic Gabhainn, S. (2015). *The Irish Health Behaviour in School-aged Children (HBSC) study 2014*. Galway: Department of Health/NUIG.
- Geckova, M., Tavel, P., van Dijk, J., Abel, T., & Reijneveld, S. (2010). Factors associated with educational aspirations among adolescents: Cues to counteract socioeconomic differences? *BMC Public Health*, 10:154, 1-9.
- Gestsdottir, S. & Lerner, R. (2008). Positive development in adolescence: The development and role of intentional self-regulation. *Human Development*, 51, 202-224.
- Ghasemi, A. & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for nonstatisticians. *International Journal of Endocrinology and Metabolism*, 10, 486-489.
- Gilleece, L., Shiel, G., Perkins, R., & Proctor, M. (2009). *Teaching and Learning International* Survey (2008): National report for Ireland. Dublin: Educational Research Centre.
- Gilman, R., Huebner, E., Tian, L., Park, N., O'Byrne, J., Schiff, M., Sverko, D. & Langknecht, H. (2008). Cross-national adolescent multidimensional life satisfaction reports: Analyses of mean scores and response style differences. *Journal of Youth and Adolescence*, 37, 142-154.
- Gorard, P. (2010). School experience as a potential determinant of post-compulsory participation. *Evaluation & Research in Education*, 23, 3-17.
- Graeme Dingle Foundation (2016). *About Project K*. Retrieved 26 March 2016 from <u>http://www.dinglefoundation.org.nz/projectk/about</u>.
- Graham, J. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology*, 60, 549-576.
- Greenberger, E. & Bond, L., (1984). *Psychosocial maturity inventory: Form D.* Irvine: University of California, Irvine, Department of Social Ecology.

- Greenberger E, Josselson R, Knerr C, & Knerr B. (1975). The measurement and structure of psychosocial maturity. *Journal of Youth and Adolescence*, 4, 127-143.
- Greenberger, E., Lessard, J., Chen, C., & Farrugia, S. (2008). Self-entitled college students: contributions of personality, parenting, and motivational factors. *Journal of Youth and Adolescence*, 37, 1193-1204.
- Greenberger, E. & Sørensen, A. (1974). Toward a concept of psychosocial maturity. *Journal of Youth and Adolescence*, 3, 329-358.
- Greene, B. & Miller, R. (1996). Influences on achievement: Goals, perceived ability, and cognitive engagement. *Contemporary Educational Psychology*, 21, 181-192.
- Greene, J., Caracelli, V., & Graham, W. (1989). Toward a conceptual framework for mixedmethod evaluation designs. *Educational Evaluation and Policy Analysis*, 11, 255-274.
- Grolnick, W., Ryan, R., & Deci, E. (1991). Inner resources for school achievement: motivational mediators of children's perceptions of their parents. *Journal of Educational Psychology*, 83, 508-517.
- Grube, J., Morgan, M. & Kearney, K. (1989). Using self-generated identification codes to match questionnaires in panel studies of adolescent substance abuse. *Addictive Behaviors*, 14, 159-171.
- Guay, F., Ratelle, C., & Chanal, J. (2008). Optimal learning in optimal contexts: The role of self-determination in education. *Canadian Psychology*, 49, 233-240.
- Guiot, D. (2000). Subjective age biases among adolescent girls. In S. Hoch & R. Meyer (eds.), *Advances in Consumer Research* (vol. 27, pp. 215-223). Provo, UT: Association of Consumer Research
- Guiot, D. (2001a). Antecedents of subjective age biases among senior women. Psychology & Marketing, 18, 1049-1071
- Guiot, D. (2001b). Tendance d'âge subjectif: Quelle validité prédictive? Recherche et Applications en Marketing, 16, 25-43
- Hamer, R. & Bruch, M. (1997). Personality factors and inhibited career development: Testing the unique contribution of shyness. *Journal of Vocational Behavior*, 50, 382-400.
- Hamilton, S., Richards, F., Stewart, S., Frankel W., & Caracelli, V. (1983). The use of the psychosocial maturity inventory in evaluations of youth conservation corps programs. *Children and Youth Services Review*, 5, 357-373.
- Hanafin, S., Brooks, A., Roche, G. & Meaney, B. (2012). Advancing understandings of child well-being through the strategic development of a national children's research programme. *Child Indicators Research*, 5, 567-586.
- Hannan, D. & Shortall, S. (1991). The quality of their education: School leavers' views of educational objectives and outcomes. ESRI research paper No. 153. Dublin: ESRI.
- Hannan, D., Smyth, E., McCullagh, J., O'Leary, R., & McMahon, D. (1996). Coeducation and gender equality: Exam performance, stress and personal development. Dublin: Oak Tree Press/ESRI.
- Haranin, E., Huebner, E.S., & Suldo, S. (2007). Predictive and incremental validity of global and domain-based adolescent life satisfaction reports. *Journal of Psychoeducational Assessment*, 25, 127-138.

- Harris, J. (1982). Transition year programmes in the Republic of Ireland a case study of Newpark School, Dublin. In J. Egglestone (Ed.), Work Experience in Secondary Schools. London: Routledge & Kegan Paul.
- Hascher, T. (2008). Quantitative and qualitative research approaches to assess student wellbeing. *International Journal of Educational Research*, 47, 84-96.
- Hawkins, M., Letcher, P., Sanson, A., Smart, D. & Toumbourou, J. (2009). Positive development in emerging adulthood. *Australian Journal of Psychology*, 61, 89–99.
- Hayes, S. & Childs, P. (2012, March). Science in the Irish Transition Year: Implications for the future of science teaching and learning. Paper presented at the Educational Studies Association of Ireland annual conference, Cork, Ireland.
- Hayes, S., Childs, P., & O'Dwyer, A. (2013). Science in the Irish Transition Year: An opportunity to change the way science is taught. In T. Plomp & N. Nieveen (Eds.), *Educational design research – Part B: Illustrative cases* (pp. 733-755). Enschede, the Netherlands: SLO.
- Heath, S. (2007). Widening the gap: Pre-university gap years and the 'economy of experience'. *British Journal of Sociology of Education*, 28, 89-103.
- Hedges, L. & Rhoads, C. (2009). Statistical power analysis in education research (NCSER 2010-3006). Washington, DC: National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education.
- Helliwell, J. (2008). *Life satisfaction and quality of development (NBER Working Paper #14507)*. Cambridge, Massachusetts: National Bureau of Economic Research.
- Helliwell, J. & Putnam, R. (2004). The social context of well-being. *The Philosophical Transactions of the Royal Society of London*, 359, 1435–1446.
- Henson, R. (2001). Understanding internal consistency reliability estimates: A conceptual primer on coefficient alpha. *Measurement and Evaluation in Counseling and Development*, 34, 177-189.
- Hogan, M. & Broome, B. (2013). Wellbeing in Ireland 2013 Conference: Designing measures and implementing policies. Galway: NUI Galway.
- Hogben, L., Johnstone, M. & Cross, K. (1948). Identification of medical documents. British Medical Journal, 4552, 632-635.
- Holm, S. (1979). A simple sequentially rejective multiple test procedure. *Scandinavian Journal of Statistics*, 6, 65-70.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods*, 6, 53-60.
- Hox, J. (1997). Multilevel modeling: When and why. In I. Balderjahn, R. Mathar & M. Schader (Eds.), *Classification, data analysis, and data highways* (pp. 147-154). New York: Springer Verlag.
- Hsieh, H. & Shannon, S. (2005). Three approaches to qualitative data analysis. *Qualitative Health Research*, 15, 1277-1288.
- Hu, L. & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1-55.

- Hubley, A. & Russell, L. (2009). Prediction of subjective age, desired age, and age satisfaction in older adults: Do some health dimensions contribute more than others? *International Journal of Behavioral Development*, 33, 12-21.
- Huebner, E. S. (2001). *Manual for the Multidimensional Students' Life Satisfaction Scale*. Columbia: University of South Carolina, Department of Psychology.
- Huebner, E. S. (2004). Research on assessment of life satisfaction of children and adolescents. *Social Indicators Research*, 66, 3-33.
- Huebner, E. S., Ash, C. & Laughlin, J. E. (2001). Life experiences, locus of control, and school satisfaction in adolescence. *Social Indicators Research*, 55, 167-183.
- Huebner, E.S. & Dew, T. (1996). The interrelationships of positive affect, negative affect, and life satisfaction in an adolescent sample. *Social Indicators Research*, 38, 129-137.
- Huebner, E.S., Drane, W., & Valois, R. (2000). Levels and demographic correlates of adolescent life satisfaction reports. *School Psychology International*, 21, 281-292.
- Huebner, E.S., Funk, B., & Gilman, R. (2000). Cross-sectional and longitudinal psychosocial correlates of adolescent life satisfaction reports. *Canadian Journal of School Psychology*, 16, 53–64.
- Huebner, E.S. & Gilman, R. (2002). An introduction to the Multidimensional Students' Life Satisfaction Scale. *Social Indicators Research*, 60, 115-122.
- Huebner, E.S. & Gilman, R. (2006). Students who like and dislike school. *Applied Research in Quality of Life*, 1, 139-150.
- Huebner, E.S., Laughlin, J., Ash, C., & Gilman, R. (1998). Further validation of the Multidimensional Students' Life Satisfaction Scale. *Journal of Psychoeducational Assessment*, 16, 118–134.
- Huebner, E.S., Valois, R., Suldo, S., Smith, L., McKnight, C., Seligson, J., & Zullig, K. (2004). Perceived quality of life: A neglected component of adolescent health assessment and intervention. *Journal of Adolescent Health*, 34, 270-278.
- Huebner, E.S., Zullig, K., & Saha, R. (2012). Factor structure and reliability of an abbreviated version of the Multidimensional Students' Life Satisfaction Scale. *Child Indicators Research*, 5, 651-657.
- Humphrey, N., Lendrum, A., & Wigelsworth, M. (2010). Social and emotional aspects of learning (SEAL) programme in secondary schools: national evaluation. Research Brief DFE-RB049. London: Department for Education.
- Humphreys, E. (1998). Transition Year: An opportunity for creative assessment. In Á. Hyland (Ed.), *Innovations in Assessment in Irish Education*. Cork: University College Cork.
- Hunter, J. & Hamilton, M. (2002). The advantages of using standardized scores in causal analyses. *Human Communication Research*, 28, 552-561.
- Hutchison, D. (2009). Designing your sample efficiently: clustering effects in education surveys. *Educational Research*, 51, 109-126.
- Ikesako, H. & Miyamoto, K. (2015). Fostering social and emotional skills through families, schools and communities: Summary of international evidence and implication for Japan's educational practices and research. OECD Education Working Papers, No. 121. Paris: OECD.
- Innes, J. M. & Thomas, C. (1989). Attributional style, self-efficacy and social avoidance and inhibition among secondary school students. *Personality and Individual Differences*, 10, 757-762

- Irish Independent (14 January 2009). Second-level students get lost in transition. Retrieved 12 March 2012 from <u>www.independent.ie/education/latest-news/secondlevel-students-get-lost-in-transition-1600544.html</u>.
- Irish Times (20 December 2011). The programme is an idler's charter. Retrieved 12 March 2012 from

www.irishtimes.com/newspaper/education/2011/1220/1224309289206.html.

- Irish Times (14 February 2012). The formula is simple: real change. Retrieved 12 March 2012 from www.irishtimes.com/newspaper/education/2012/0214/1224311742193.html.
- Irish Times (19 March 2012). Scrap 'self-indulgent' transition year, urges elderly lobby group. Retrieved 19 March 2012 from www.irishtimes.com/newspaper/frontpage/2012/0319/1224313529947.html.
- Irish Times (4 May 2012). Quinn says Chinese will be offered as Leaving Cert subject. Retrieved 4 May 2012 from www.irishtimes.com/newspaper/ireland/2012/0504/1224315591545.html.
- Irish Second-level Students' Union. (2014). *Transition Year: Exploring the student experience*. Dublin: ISSU.
- IRRE [Institute for Research and Reform in Education]. (1998). Research Assessment Package for Schools (RAPS): Manual for elementary and middle-school assessments. New Jersey: IRRE.
- Jang, H., Reeve J., & Deci, E. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of Educational Psychology*, 102, 588-600.
- Jeffers, G. (2002). Transition year programme and educational disadvantage. *Irish Educational Studies*, 21, 47-64.
- Jeffers, G. (2004). Implementing the Transition Year Programme in the Republic of Ireland. In A. Burke (Ed.), *Teacher Education in the Republic of Ireland: Retrospect and Prospect.* Armagh: Centre for Cross Border Studies.
- Jeffers, G. (2007a). *Attitudes to Transition Year: A report to the Department of Education and Science.* Maynooth: Education Department, NUI Maynooth.
- Jeffers, G. (2007b). *Designing a Transition Year Programme getting to the heart of the matter*. Paper presented at the Transition Year National Conference, 'Celebrating Innovation and Developing the Experience', Naas, Ireland.
- Jeffers, G. (2010). The role of school leadership in the implementation of the Transition Year programme in Ireland. *School Leadership & Management*, 30, 469-486.
- Jeffers, G. (2011). The Transition Year programme in Ireland: Embracing and resisting a curriculum innovation. *Curriculum Journal*, 22, 61–76.
- Jeffers, G. (2012, March). Work experience placements in school programmes: stretching horizons. Paper presented at the Educational Studies Association of Ireland annual conference, Cork, Ireland.
- Jeffers, G. (2015). Transition Year in Action. Dublin: Liffey Press.
- Jerusalem, M. & Hessling, J. (2009). Mental health promotion in schools by strengthening self-efficacy. *Health Education*, 109, 329–341.
- Jiang, X., Huebner, E.S., & Siddall, J. (2013). A short-term longitudinal study of differential sources of school-related social support and adolescents' school satisfaction. *Social Indicators Research*, 114, 1073-1086.

- Jimerson, S., Campos, E., & Greif, J. (2003). Towards an understanding of definitions and measures of school engagement and related terms. *California School Psychologist*, 8, 7-28.
- Jimerson, S., Egeland, B., Sroufe, L., & Carlson, B. (2000). A prospective longitudinal study of high school dropouts examining multiple predictors across development. *Journal of School Psychology*, 38, 525-549.
- Jimerson, S., Sharkey, J., Nyborg V., & Furlong, M. (2004). Strength-based assessment and school psychology: A summary and synthesis. *California School Psychologist*, 9, 9-21.
- Joint Oireachtas Committee on Education and Science. (2004). Transition Year Programmes: Presentation. Retrieved 29 May 2013 from <u>http://debates.oireachtas.ie/EDJ/2004/03/25/00003.asp</u>.
- Joint Oireachtas Committee on Education and Skills. (2010). *Staying in education a new way forward: School and out-of-school factors protecting against early school leaving*. Dublin: Stationery Office.
- Jones, A. (2004). Review of gap year provision (Research Report No. 555). London: Department for Education and Skills.
- Jones, K. (1993). Using multilevel models for survey analysis. *Journal of the Market Research Society*, 35, 249-265.
- Josselson, R., Greenberger, E. & McConochie, D. (1975a). On the validity of the Psychosocial Maturity Inventory: Relationship to measures of personal well-being. Report No. 199. Baltimore: Center for the Study of Social Organization of Schools, Johns Hopkins University.
- Josselson, R., Greenberger, E. & McConochie, D. (1975b). On the validity of the Psychosocial Maturity Inventory: Relationship to teacher nominations. Report No. 202. Baltimore: Center for the Study of Social Organization of Schools, Johns Hopkins University.
- Katja, R., Päivi, Å., Marja-Terttu, T. & Pekka, L. (2002). Relationships among adolescent subjective well-being, health behaviour, and school satisfaction. *Journal of School Health*, 72, 243-249.
- Kamp, A., Black, D., & Abbott, L. (2014). 3 PLY Exploring the potential for transformative workplace learning for and by teachers. Report to the Standing Conference on Teacher Education, North & South (SCoTENS).
- Kellaghan, T. & Lewis, M. (1991). *Transition education in Irish schools*. Dublin: Educational Company of Ireland.
- Kellaghan, T., McGee, P., Millar, D., & Perkins, R. (2004). Views of the Irish public on education: 2004 survey. Dublin: Educational Research Centre.
- Kelle, U. (2006). Combining qualitative and quantitative methods in research practice: purposes and advantages. *Qualitative Research in Psychology*, 3, 293-311.
- Kim, H. (2013). Statistical notes for clinical researchers: assessing normal distribution using skewness and kurtosis. *Restorative Dentistry and Endodontics*, 38, 52-54.
- Kirk, C., Lewis, R., Scott, A., Wren, D., Nilsen, C., & Colvin, D. (2012): Exploring the educational aspirations-expectations gap in eighth grade students: Implications for educational interventions and school reform. *Educational Studies*, 38, 507-519.
- Kitching, K., Morgan, M., & O'Leary, M. (2009). It's the little things: exploring the importance of commonplace events for early career teachers' motivation. *Teachers and Teaching*, 15, 43-58.

- Knoll, N., Rieckmann, N., Scholz, U., & Schwarzer, R. (2004). Predictors of subjective age before and after cataract surgery: Conscientiousness makes a difference. *Psychology & Aging*, 19, 676-688.
- Koerner, S., Kenyon, D., & Ranking, L. (2006). Growing up faster? Journal of Divorce & Remarriage, 45, 25-41.
- Kortering, L. & Braziel, P. (2008). Engaging youth in school and learning: the emerging key to school success and completion. *Psychology in the Schools*, 45, 461-465.
- Krahn, H., Lowe, G., & Lehmann, W. (2002). Acquisition of employability skills by high school students. *Canadian Public Policy/ Analyse de Politiques*, 28, 275-296.
- Kristjánsson, K. (2012). Positive psychology and positive education: Old wine in new bottles? *Educational Psychologist*, 47, 86–105.
- Kurtines, W., Ferrer-Wreder, L., Berman, S., Lorente, C., Silverman, W. & Montgomery, M. (2008). Promoting positive youth development: New directions in developmental theory, methods, and research. *Journal of Adolescent Research*, 23, 233–244.
- Ladd, G., Herald-Brown, S., & Reiser, M. (2008). Does chronic classroom peer rejection predict the development of children's classroom participation during the grade school years? *Child Development*, 79, 1001-1015.
- La Guardia, J. (2009). Developing who I am: A self-determination theory approach to the establishment of healthy identities. *Educational Psychologist*, 44, 90-104.
- Lai, M. & Kwok, O. (2015). Examining the rule of thumb of not using multilevel modeling: The "design effect smaller than two" rule. *The Journal of Experimental Education*, 83, 423-438.
- Lamborn, S. & Groh, K. (2009). A four-part model of autonomy during emerging adulthood: Associations with adjustment. *International Journal of Behavioral Development*, 33, 393-401.
- Lamborn, S., Mounts, N., Steinberg, L., & Dornbusch, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62, 1049-1065.
- Lane, S., Franklin, J., & Curran, P. (2013). Clarifying the nature of startle habituation using latent curve modelling. *International Journal of Psychophysiology*, 88, 55-63.
- Lanza, S., Rhoades, B., Nix, R., Greenberg, M., & the Conduct Problems Prevention Research Group (2010). Modeling the interplay of multilevel risk factors for future academic and behaviour problems: A person-centred approach. *Developmental Psychopathology*, 22, 313-335.
- Le Métais, J. (2003a). International developments in upper secondary education: Context, provision and *issues*. Dublin: NCCA.
- Le Métais, J. (2003b). International trends in curriculum frameworks. *The Educational Forum*, 67, 235–247.
- Lee, B., Westaby, J., & Berg, R. (2004). Impact of a national rural youth health and safety initiative: Results from a randomized controlled trial. *American Journal of Public Health*, 94: 1743-49.
- Leffert, N., Benson, P., Scales, P., Sharma, A., Drake, D., & Blyth, D. (1998). Developmental assets: Measurement and prediction of risk behaviors among adolescents. *Applied Developmental Science*, 2, 209-230.

- Lent, R. (2004). Toward a unifying theoretical and practical perspective on well-being and psychosocial adjustment. *Journal of Counseling Psychology*, 4, 482-509.
- Lent, R. & Brown, S. (2006). On conceptualizing and assessing social cognitive constructs in career research: A measurement guide. *Journal of Career Assessment*, 14, 12-35.
- Lent, R., Lopez, F., Brown, S., & Gore, P. (1996). Latent structure of the sources of mathematics self-efficacy. *Journal of Vocational Behavior*, 49, 292-308.
- Lent, R., Singley, D., Sheu, H., Gainor, K., Brenner, B., Triestman, D., & Ades, L. (2005). Social cognitive predictors of domain and life satisfaction: Exploring the theoretical precursors of subjective well-being. *Journal of Counseling Psychology*, 52, 429-442.
- León, J. & Núñez, J. (2013). Causal ordering of basic psychological needs and well-being. *Social Indicators Research*, 114, 243-253.
- Lerner, R., Lerner, J., Almerigi, J., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A., Ma, L., Smith, L., Bobek, D., Richman-Raphael, D., Simpson, I., Christiansen, E. & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifthgrade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence*, 25, 17–71.
- Leung, J. & Shang, L. (2000). Modelling life satisfaction of Chinese adolescents in Hong Kong. *International Journal of Behavioral Development*, 24, 99-104.
- Levin, H. (2009). The economic payoff to investing in educational justice. *Educational Researcher*, 38, 5-20.
- Levin, H. (2012). More than just test scores. Prospects: Quarterly Review of Comparative Education, 42, 269-284.
- Lewis, M. & Kellaghan, T. (1987). Vocationalism in Irish second-level education. *Irish Journal* of Education, 21, 5-35.
- Lewis, M. & McMahon, L. (1996). Evaluation of a training of trainers in-service education model: The Transition Year in-career development programme. Dublin: Educational Research Centre.
- Li, Y., Lerner, J.V., & Lerner, R. M. (2010). Personal and ecological assets and academic competence in early adolescence: The mediating role of school engagement. *Journal of Youth and Adolescence*, 39, 801-815.
- Linley, P., Joseph, S., Harrington, S., & Wood, A. (2006). Positive psychology: Past, present, and (possible) future. *The Journal of Positive Psychology*, 1, 3-16.
- Little, T., Cunningham, W., Shahar, G. & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling: A Multidisciplinary Journal*, 9, 151-173.
- Locascio, J. & Atri, A. (2011). An overview of longitudinal data analysis methods for neurological research. *Dementia and Geriatric Cognitive Disorders Extra*, 1, 330-357.
- Long, R., Huebner, E.S., Wedell, D., & Hills, K. (2012). Measuring school-related subjective well-being in adolescents. *American Journal of Orthopsychiatry*, 82, 50-60.
- Ludlow, L., Pedulla, J., Reagan, E., Enterline, S., Cannady, M., & Chappe, S. (2011). Design and implementation issues in longitudinal research. *Educational Policy Analysis Archives*, 19(11). Retrieved 29 Nov. 2011 from <u>http://epaa.asu.edu/ojs/article/view/802</u>.
- Lumley, T., Diehr, P., Emerson, S., & Chen, L. (2002). The importance of the normality assumption in large public health datasets. *Annual Review of Public Health*, 23, 151-169.

- Lyons, M., Huebner, E.S., Hill, K., & van Horn, M. (2013). Mechanisms of change in adolescent life satisfaction: A longitudinal analysis. *Journal of School Psychology*, 51, 987-598.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131, 803-855.
- Maas, C. & Hox, J. (2005). Sufficient sample sizes for multilevel modelling. *Methodology*, 1, 86-92.
- Macaskill, A. & Denovan, A. (2013). Developing autonomous learning in first-year university students using perspectives from positive psychology. *Studies in Higher Education*, 38, 124-142.
- Macaskill, A. & Denovan, A. (2013). Developing autonomous learning in first-year university students using perspectives from positive psychology. *Studies in Higher Education*, 38, 124-142.
- MacCallum, R. & Austin, J. (2000). Applications of structural equation modelling in psychological research. *Annual Review of Psychology*, 51, 201-226.
- Madaus, G. (1988). The distortion of teaching and testing: High-stakes testing and instruction. *Peabody Journal of Education*, 65, 29-46.
- Maddox, S. J. & Prinz, R. J. (2003). School bonding in children and adolescents: Conceptualization, assessment, and associate variables. *Clinical Child and Family Psychology Review*, 6, 31-49.
- Mantzicopoulos, P. & Oh-Kwang, Y. (1998). The relationship of psychosocial maturity to parenting quality and intellectual ability for American and Korean adolescents. *Contemporary Educational Psychology*, 23, 195-206.
- Mansell, W. (2010). Has New Labour's numbers drive done lasting damage to State education? *Forum*, 52, 205-212.
- Marks, H. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37, 153-184.
- Martin, A. (2004). School motivation of boys and girls: Differences of degree, differences of kind, or both? *Australian Journal of Psychology*, 56, 133-146.
- Martin, A. (2007). Examining a multidimensional model of student motivation and engagement using a construct validation approach. *British Journal of Educational Psychology*, 77, 413-440.
- Martin, A. (2010). Should students have a gap year? Motivation and performance factors relevant to time out after completing school. *Journal of Educational Psychology*, 102, 561–576.
- Martin, A. & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79, 327-365.
- McAlister, A. & Gordon, N. (1986). Attrition bias in a cohort study of substance abuse onset and prevention. *Evaluation Review*, 10, 853-59.
- McArdle, J. (2009). Latent variable modelling of differences and changes with longitudinal data. *Annual Review of Psychology*, 60, 577-605.

- McCoy, S., Byrne, D., O'Connell, P., Kelly, E., & Doherty, C. (2010). *Hidden disadvantage? A study on the low participation in higher education by the non-manual group.* Dublin: Higher Education Authority.
- McCoy, S., & Smyth, E. (2004). At work in school: Part-time employment among second-level students. Dublin: Liffey Press/ESRI.
- McCoy, S., & Smyth, E. (2007). So much to do, so little time: Part-time employment among secondary students in Ireland. *Work, employment and society*, 21, 227-246.
- McCoy, S., Smyth, E., Darmody, M., & Dunne, A., (2006). *Guidance for all? Guidance provision in second-level schools*. Dublin: Liffey Press/ESRI.
- McFarlane, A.H., Bellissimo, A. & Norman, G. R. (1995). The role of the family and peers in social self-efficacy: Links to depression in adolescence. *American Journal of Orthopsychiatry*, 65, 402–410
- McGloin, J., Holcomb, S., & Main, D. (1996). Matching anonymous pre-posttests using subject-generated information. *Evaluation Review*, 20, 724-736.
- McGrath, B., Brennan, M., Dolan, P. & Barnett, R. (2009). Adolescent well-being and supporting contexts: A comparison of adolescents in Ireland and Florida. *Journal of Community & Applied Social Psychology*, 19, 299-320.
- McKay, M. T., Sunmall, H., Goudie, A. J., Field, M., & Cole, J.C. (2011). What differentiates adolescent problematic drinkers from their peers? Results from a cross-sectional study in Northern Irish school children. *Drugs: education, prevention and policy*, 18, 187-199.
- Meyers, J. & Meyers, W. (2004). Bi-directional influences between positive psychology and primary prevention. *School Psychology Quarterly*, 18, 222-229.
- Millar, D. & Kelly, D. (1999). From Junior to Leaving Certificate: A longitudinal study of 1994 Junior Certificate candidates who took the Leaving Certificate Examination in 1997. Final Report. Dublin: Educational Research Centre / NCCA.
- Miller, R. & Holliest, C. (2007). Attrition bias. In N. Salkind (Ed.), *Encyclopedia of Measurement and Statistics* (pp. 57-60). Thousand Oaks: Sage Reference.
- Miller, R. & Wright, D. (1995). Detecting and correcting attrition bias in longitudinal family research. *Journal of Marriage and the Family*, 57, 921-929.
- Miller, B., Norton, M., Fan, X., & Christopherson, C. (1998). Pubertal development, parental communication, and sexual values in relation to adolescent sexual behaviors. *Journal of Early Adolescence*, 18, 27-52.
- Moffitt, T. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 674-701.
- Monahan, K., Steinberg, L., Cauffman, E., & Mulvey, E. (2009). Trajectories of antisocial behavior and psychosocial maturity from adolescence to young adulthood. *Developmental Psychology*, 45, 1654-1668.
- Montepare, J.M. (1991). Characteristics and psychological correlates of young adult men's and women's subjective age. *Sex Roles*, 24, 323–333.
- Montepare, J. (2009). Subjective age: Toward a guiding lifespan framework. *International Journal of Behavioral Development*, 33, 42-46.
- Montepare, J. & Clements, A. (2001). "Age schemas": Guides to processing information about the self. *Journal of Adult Development*, 8, 99-108.

- Montepare, J. & Lachman, M. (1989). "You're only as old as you feel": Self-perceptions of age, fears of aging, and life satisfaction from adolescence to old age. *Psychology of Aging*, 4, 73-78.
- Moore, K., Lippman, L. & Brown, B. (2004). Indicators of child well-being: The promise for positive youth development. *Annals of the American Society of Political and Social Science*, 591, 125–145.
- Moore, K., Lippman, L., & Ryberg, R. (2015). Improving outcome measures other than achievement. *AERA Open*, 1, 1-25.
- Moran, G., Perkins, R., Cosgrove, J., & Shiel, G. (2013). *Mathematics in Transition Year: Insights of teachers from PISA 2012*. Dublin: Educational Research Centre.
- Morgan, M. (2000). School and part-time work in Dublin the facts: Survey, analysis and recommendations. (Dublin Employment Pact Policy Paper No. 4.) Dublin: Dublin Employment Pact.
- Moskowitz, D. & Hershberger, S. (2002). *Modeling intraindividual variability with repeated measures data: Methods and applications.* New Jersey: Lawrence Erlbaum Associates.
- Moynihan, J. (2013). Work experience in Transition Year: a mixed methods study of subject and career choices. Unpublished PhD Thesis, University College Cork. Retrieved 3 June 2016 from <u>http://hdl.handle.net/10468/1259</u>.
- Multon, K., Brown, S., & Lent, R. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38, 30-38.
- Muris, P. (2001). A brief questionnaire for measuring self-efficacy in youths. *Journal of Psychopathology and Behavioral Assessment*, 23, 145-149.
- Muthén, B. (2004). Latent variable analysis: Growth mixture modeling and related techniques for longitudinal data. In D. Kaplan (Ed.), *Handbook of quantitative methodology for the social sciences* (pp.345-368). Newbury Park, CA: Sage Publications.
- Muthén, B. & Curran, P. (1997). General longitudinal modeling of individual differences in experimental designs: A latent variable framework for analysis and power estimation. *Psychological Methods*, 2, 371-402.
- Muthén, B. & Khoo, S. (1998). Longitudinal studies of achievement growth using latent variable modeling. *Learning and Individual Differences*, 10, 73-101.
- Muthén, B. & Muthén, L. (2000). Integrating person-centred and variable-centered analyses: Growth mixture modeling with latent trajectory classes. *Alcoholism: Clinical and Experimental Research.* 24, 882-891.
- Muthén, L. & Muthén, B. (2010). *MPlus user's guide. Sixth edition.* Los Angeles, CA: Muthén & Muthén.
- Muthén, B. & Satorra, A. (1995). Complex sample data in structural equation modeling. *Sociological Methodology*, 25, 267-316.
- Natvig, G., Albrektsen, G., & Qvarnstrom, U. (2003). Associations between psychosocial factors and happiness among school adolescents. *International Journal of Nursing Practice*, 9, 166-175.
- NCCA [National Council for Curriculum and Assessment]. (2002). Developing Senior Cycle education: Consultative paper on issues and options. Dublin: NCCA.
- NCCA [National Council for Curriculum and Assessment]. (2003). Developing Senior Cycle: directions for development. Dublin: NCCA.

- NCCA [National Council for Curriculum and Assessment]. (2011). Innovation happens: Classrooms as sites of change. Dublin: Author.
- Nezlek, J. (2008). An introduction to multilevel modeling for social and personality psychology. *Social and Personality Psychology Compass*, 2, 842-860.
- Niemiec, C. & Ryan, R. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7, 133-144.
- Noom, M., Deković, M., & Meeus, W. (2001). Conceptual analysis and measurement of adolescent autonomy. *Journal of Youth and Adolescence*, 30, 577-595.
- Norrish, J., Williams, P., O'Connor, M., & Robinson, J. (2013). An applied framework for positive education. *International Journal of Wellbeing*, 3, 147-161.
- Nota, L., Soresi, S., Ferrari, L., & Wehmeyer, M. (2011). A multivariate analysis of the selfdetermination of adolescents. *Journal of Happiness Studies*, 12, 245-266.
- Ó Breacháin, A. & O'Toole, L. (2013). Pedagogy or politics? Cyclical trends in literacy and numeracy in Ireland and beyond. *Irish Educational Studies*, 32, 401-419.
- O'Brien, M. (2008). Well-being and post-primary schooling: A review of the literature and research. Dublin: NCCA.
- OECD [Organisation for Economic Co-operation and Development]. (2005). The definition and selection of key competencies: Executive summary. Paris: Author.
- Ollendick, T., Weist, M., Borden, M. C., & Greene, R. (1992). Sociometric status and academic, behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Consulting and Clinical Psychology*, 60, 80-87.
- Olsson, C., McGee, R., Nada-Raja, S., & Williams, S. (2013). A 32-year longitudinal study of child and adolescent pathways to well-being in adulthood. *Journal of Happiness Studies*, 14, 1069-1083.
- OMCYA [Office of the Minister for Children and Youth Affairs]. (2008). State of the Nation's Children: Ireland 2008. Dublin: Stationery Office.
- OMCYA [Office of the Minister for Children and Youth Affairs]. (2010). Ethical review and children's research in Ireland. Dublin: Stationery Office.
- Opdenakker, M., Maulana, R., & den Brok, P. (2012). Teacher-student interpersonal relationships and academic motivation within one school year: developmental changes and linkage. School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice, 23, 95-119.
- Opdenakker, M. & Van Damme, J. (2000). Effects of schools, teaching staff and classes on achievement and well-being in secondary education: Similarities and differences between school outcomes. *School Effectiveness and School Improvement*, 11, 165-196.
- Osborne, J. & Overbay, A. (2004). The power of outliers (and why researchers should always check for them). *Practical Assessment, Research & Evaluation*, 9(6).
- Palmer, D., Berg, C., Wiebe, D., Beveridge, R., Korbel, C., Upchurch, R., Swinyard, M., Lindsay, R., & Donaldson, D. (2004). The role of autonomy and pubertal status in understanding age differences in maternal involvement in diabetes responsibility across adolescence. *Journal of Pediatric Psychology*, 29, 35-46.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. Review of Educational Research, 66, 543-578.

- Pajares, F. (2006). Self-efficacy in childhood and adolescence Implications for teachers and parents. In F. Pajares & T. Urdan (eds.), *Self-Efficacy Beliefs of Adolescents* (pp. 339-367). Greenwich, CT: Information Age Publishing.
- Pajares, F., & Miller, M. D. (1994). The role of self-efficacy and self-concept beliefs in mathematical problem-solving: A path analysis. *Journal of Educational Psychology*, 86, 193-203.
- Paris, S. & Newman, R. (1990). Developmental aspects of self-regulated learning. *Educational Psychologist*, 25, 87-102.
- Park, N. (2004). The role of subjective well-being in positive youth development. *Annals of the American Society of Political and Social Science*, 591, 25–39.
- Parker, J. & Asher, S. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin*, 102, 357-389.
- Parker, P., Thoemmes, F., Duineveld, J., & Salmela-Aro, K. (2015). I wish I had (not) taken a gap year? The psychological and attainment outcomes of different post-school pathways. *Developmental Psychology*, 51, 323-333.
- Pastorelli, C., Caprara, G., Barbaranelli, C., Rola, A., Rosza, S., & Bandura, A. (2001). The structure of children's perceived self-efficacy: A cross-national study. *European Journal* of Psychological Assessment, 17, 87-97.
- Patton, M. (2002). Qualitative research and evaluation methods. Thousand Oaks, CA: Sage.
- Patrick, H., Hicks, L., & Ryan, A. (1997). Relations of perceived self-efficacy and social goal pursuit to self-efficacy for academic work. *Journal of Early Adolescence*, 17, 109-128.
- Patterson, R. M. & O'Brien, K. M. (1997, August). An analysis of social self-efficacy in college students: A test of theory and implications for counseling. Paper presented at the 105th annual convention of the American Psychological Association, Chicago.
- Pearl, J. (2012). The causal foundations of structural equation modeling. In R. Hoyle (Ed.), Handbook of Structural Equation Modeling, (pp. 68-91). New York: Guilford Press.
- Perkins, R., Cosgrove, J., Moran, G., & Shiel, G. (2012). PISA 2009: Results for Ireland and changes since 2000. Dublin: Educational Research Centre.
- Perkins, R., Shiel, G., Merriman, B., Cosgrove, J., & Moran, G. (2013). Learning for life: The achievements of 15-year-olds in Ireland on mathematics, reading literacy and science in PISA 2012. Dublin: Educational Research Centre.
- Perkins, R. & Shiel, G. (2014). Problem solving in PISA: The results of 15-year-olds on the computerbased assessment of problem-solving in PISA 2012. Dublin: Educational Research Centre.
- Peugh, J. (2010). A practical guide to multilevel modeling. *Journal of School Psychology*, 48, 85-112.
- Phillips, S., Blustein, D., Jobin-Davis, K. & Finkelberg White, S. (2002). Preparation for the school-to-work transition: the views of high school students. *Journal of Vocational Behavior*, 61, 202–216.
- Piko, B. & Hamvai, C. (2010). Parent, school and peer-related correlates of adolescents' life satisfaction. *Children and Youth Services Review*, 32, 1479-1482.
- Pintrich, P. & Schunk, D. (1996). *Motivation in education: Theory, research and applications*. New Jersey: Prentice Hall.

- Pitre, P. (2011). P-20 education policy: School to college transition policy in Washington State. Education Policy Analysis Archives, 19 (5). Retrieved 23 July 2012 from <u>http://epaa.asu.edu/ojs/article/view/888</u>.
- Pollard, E. & Lee, P. (2003). Child well-being: A systematic review of the literature. *Social Indicators Research*, 61, 59-78.
- Preacher, K., Curran, P., & Bauer, D. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31, 437-448.
- Preacher, K., Wichman, A., MacCallum, R., & Briggs, N. (2008). *Latent growth curve modelling*. Thousand Oaks, CA: Sage Publications.
- Proctor, C., Linley, P., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. Journal of Happiness Studies, 10, 583-630.
- Putwain, D. W. (2008). Supporting assessment stress in key stage 4 students. *Educational Studies*, 34, 83-95.
- Qiao, C. & McNaught, H. (2007). *Evaluation of Project K.* Wellington: Centre for Social Research and Evaluation.
- QSR International (2012). Nvivo qualitative analysis software, version 10. Available from <u>www.qsrinternational.com</u>.
- Quinn, R. (2013). Opening address to the Growing Up in Ireland conference on 'Children's engagement in education'. ESRI, Sir John Rogerson's Quay, Dublin. 8 May 2013.
- Rambo-Hernandez, K. & McCoach, B. (2015). High-achieving and average students' reading growth: Contrasting school and summer trajectories. *The Journal of Educational Research*, 108, 112-129.
- Rask, K., Astedt-Kurki, P., Tarkka, M., & Laippala, P. (2002). Relationships among adolescent subjective well-being, health behaviour, and school satisfaction. *Journal of School Health*, 72, 243-249.
- Raudenbush, S. (2001). Comparing personal trajectories and drawing causal inferences from longitudinal data. *Annual Review of Psychology*, 52, 501-525.
- Reddy, R., Rhodes, J. & Mulhall, P. (2003). The influence of teacher support on student adjustment in the middle school years: A latent growth curve study. *Development and Psychopathology*, 15, 119–138.
- Reeve, J. (2006). Teachers as facilitators: What autonomy-supportive teachers do and why their students benefit. *The Elementary School Journal*, 106, 225-236.
- Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, 44, 159-175.
- Reeve, J., Bolt, E., & Cai, Y. (1999). Autonomy-supportive teachers: How they teach and motivate students. *Journal of Educational Psychology*, 91, 537-548.
- Reeve, J. & Cheon, S. (2016). Teachers become more autonomy supportive after they believe it is easy to do. *Psychology of Sport and Exercise*, 22, 178-189.
- Reeve, J. & Halusic, M. (2009). How K-12 teachers can put self-determination theory principles into practice. *Theory and Research in Education*, 7, 145-154.
- Reeve, J. & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, 98, 209-218.

- Reeve, J. & Lee, W. (2014). Students' classroom engagement produces longitudinal changes in classroom motivation. *Journal of Educational Psychology*, 106, 527-540.
- Reeve, J., Nix, G., & Hamm, D. (2003). Testing models of the experience of selfdetermination in intrinsic motivation and the conundrum of choice. *Journal of Educational Psychology*, 95, 375-392.
- Reschly, A., Huebner, E.S., Appleton, J., & Antaramian, S. (2008). Engagement as flourishing: The contribution of positive emotions and coping to adolescents' engagement at school and with learning. *Psychology in the Schools*, 45, 419-431.
- Richardson, D. (2009). Enhancing child well-being in OECD countries. In ChildON Europe Secretariat (Ed.), The on-going debate on the assessment of children's conditions of life: The proceedings of the ChildON Europe seminar on child well-being indicators (pp. 19-30). Florence: Istituto degli Innocenti. Retrieved 14 November 2012 from http://www.childoneurope.org/issues/publications.htm.
- Robbins, S., Lauver, K., Le, H., Davis, D., Langley, R. & Carlstrom, A. (2004). Do psychosocial skills and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, 130, 261–288.
- Roe, R. (2008). Time in applied psychology: The study of "what happens" rather than "what is". *European Psychologist*, 13, 37-52.
- Rogers, L. (2012). Underlying factors in perceptions of studying during adolescence. *Research Papers in Education*, 28, 443-458.
- Rogers, L. (2013). Perceptions of studying during adolescence: student typologies and the relationship with attainment. *Educational Studies*, 39, 298-314.
- Roisman, G., Monahan, K., Campbell, S., Steinberg, L., Cauffman, E., & NICHHD [The National Institute of Child Health and Human Development, Early Child Care Research Network]. (2010). Is adolescence-onset antisocial behavior developmentally normative? *Development and Psychopathology*, 22, 295-311.
- Rojas, N., Sherrit, L., Harris, S., & Knight, J. (2008). The role of parental consent in adolescent substance use research. *Journal of Adolescent Health*, 42, 192-197.
- Roorda, D., Koomen, H., Spilt, J., & Oort, F. (2011). The influence of affective teacherstudent relationships on students' school engagement and achievement: A metaanalytic approach. *Review of Educational Research*, 81, 493-529.
- Rosenfeld, L., Richman, J. & Bowen, G. (2000). Social support networks and school outcomes: The centrality of the teacher. *Child and Adolescent Social Work Journal*, 17, 205-226.
- Rosenthal, D., Gurney, R., & Moore, S. (1981). From trust to intimacy: A new inventory for examining Erikson's stages of psychosocial development. *Journal of Youth and Adolescence*, 10, 525-537.
- Roth, J. L. & Brooks-Gunn, J. (2003a). What exactly is a Youth Development Program? Answers from research and practice. *Applied Developmental Science*, 7, 94-111.
- Roth, J. L. & Brooks-Gunn, J. (2003b). Youth Development Programs: Risk, prevention and policy. *Journal of Adolescent Health, 32*, 170-182.
- Rothon, C., Arephin, M., Klineberg, E., Cattell, V., & Stansfeld, S. (2011). Structural and socio-psychological influences on adolescents' educational aspirations and subsequent academic achievement. *Social Psychology of Education*, 14, 209-231.

- Rosenbaum, P. & Rubin, D. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, 70, 41-55.
- Rubin, R., Martin, M., Bruning, S., & Powers, D. (1993). Test of a self-efficacy model of interpersonal communication competence. *Communication Quarterly*, 41, 210-220.
- Rusk, R. & Waters, L. (2013). Tracing the size, reach, impact and breadth of positive psychology. *The Journal of Positive Psychology*, 8, 207-221.
- Ryan, R. & Deci, E. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
- Ryan, A. & Pintrich, P. (1997). "Should I ask for help?" The role of motivation and attitudes in adolescents' help seeking in math class. *Journal of Educational Psychology*, 89, 329-341.
- Saha, R., Huebner, E., Hills, K., Malone, P. & Valois, R. (2014). Social coping and life satisfaction in adolescents. *Social Indicators Research*, 115, 241-252.
- Salmela-Aro, K. & Tuominen-Soini, H. (2010). Adolescents' life satisfaction during the transition to post-comprehensive education: Antecedents and consequences. *Journal of Happiness Studies*, 11, 683-701.
- Sammons, P., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B., Toth, K., Draghici, D. & Smees, R. (2012a). Effective Pre-School, Primary and Secondary Education Project (EPPSE 3-14). Influences on students' attainment and progress in Key Stage 3: Academic outcomes in English, maths and science in Year 9. London: Institute of Education, University of London / Department for Education.
- Sammons, P., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B., Draghici, D., Smees, R. & Toth, K.(2012b). Effective Pre-School, Primary and Secondary Education Project (EPPSE 3-14). Influences on students' development in Key Stage 3: Social-behavioural outcomes in Year 9. London: Institute of Education, University of London / Department for Education.
- Sandelowski, M. (1998). Writing a good read: Strategies for re-presenting qualitative data. Research in Nursing & Health, 21, 375-382.
- Sandelowski, M., Voils, C., & Knafl, G. (2009). On quantitizing. *Journal of Mixed Methods* Research, 3, 208-222.
- Santelli, J. & Rogers, A. (2002). Parental permission, passive consent, and "children" in research. *Journal of Adolescent Health*, 31, 303-304.
- Santelli, J., Rogers, A., Rosenfeld, W., DuRant, R., Dubler, N., Morreale, M., English, A., Lyss, S., Wimberly, Y., & Schissel, A. (2003). Guidelines for adolescent health research: A position paper of the society for adolescent medicine. *Journal of Adolescent Health*, 33, 396-409.
- Sato, S., Shimonaka, Y., Nakazato, K., & Kawaai, C. (1997). A lifespan developmental study of age identity: Cohort and gender differences. *Japanese Journal of Developmental Psychology*, 8, 88–97
- Sawatzky R., Ratner, P. A., Johnson, J. L., Kopec, J., & Zumbo, B. D. (2009). Sample heterogeneity and the measurement structure of the Multidimensional Students' Life Satisfaction Scale. *Social Indicators Research*, 94, 273-296.
- Schafer, J. & Graham, J. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7, 147-177.

References

- Schafer, J. & Kang, J. (2008). Average causal effects from nonrandomized studies: A practical guide and simulated examples. *Psychological Methods*, 13, 279-313.
- Schlomer, G., Bauman, S., & Card, N. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology*, 57, 1-10.
- Schnell, R., Bachteler, T., & Reiher, J. (2010). Improving the use of self-generated identification codes. *Evaluation Review*, 34, 391-418.
- Schrieber, J., Nora, A., Stage, F., Barlow, E., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99, 323-337.
- Schuchart, C. (2013). School social capital and secondary education plans. *Educational Studies*, 39, 29-42.
- Schuitema, J., Peetsma, T., & van der Veen, I. (2012). Self-regulated learning and students' perceptions of innovative and traditional learning environments: A longitudinal study in secondary education. *Educational Studies*, 38, 397-413.
- Schultz, L., Selman, R., & LaRusso, M. (2003). The assessment of psychosocial maturity in children and adolescents: Implications for the evaluation of school-based character education programs. *The Journal of Research in Character Education*, 1, 67-87.
- Schumann, A., Stein, J., Ullman, J., John, U., Rumpf, H., & Meyer, C. (2008). Patterns and predictors of change in a smoking intervention study: Latent growth analysis of a multivariate outcome model. *Health Psychology*, 27, S233-S242.
- Schunk, D. (1991). Self-efficacy and academic motivation. Educational Psychologist, 26, 207-231.
- Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield & J. Eccles (eds.), *Development of achievement motivation* (pp. 16-31). San Diego: Academic Press.
- Segrin, C., Hanzal, A., Donnerstein, C., Taylor, M., & Domschke, T.J. (2007). Social skills, psychological well-being, and the mediating role of perceived stress. *Anxiety, Stress & Coping*, 20, 321-329.
- Seligman, M. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Seligman, M., Ernst, R., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. Oxford Review of Education, 35, 293-311.
- Seligson, J., Huebner, E.S., & Valois, R. (2003). Preliminary validation of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). Social Indicators Research, 61, 121-145.
- Seltzer, M., Choi, K., & Thum, Y. (2003). Examining relationships between where students start and how rapidly they progress: Using new developments in growth modeling to gain insight into the distribution of achievement within schools. *Educational Evaluation and Policy Analysis*, 25, 263-286.
- Shaffer-Hudkins, E., Suldo, S., Loker, T., & March, A. (2010). How adolescents' mental health predicts their physical health: Unique contributions of indicators of subjective well-being and psychopathology. *Applied Research in Quality of Life*, 5, 203-217.
- Shek, D. & Liu, T. (2014). Life satisfaction in junior secondary school students in Hong Kong: A 3-year longitudinal study. *Social Indicators Research*, 117, 777-794.

- Shernoff, D., Csikszentmihalyi, M., Schneider, B., & Shernoff, E. (2003). Student engagement in high school classrooms from the perspective of flow theory. *School Psychology Quarterly*, 18, 158-176.
- Shiel, G., Cosgrove, J., Sofroniou, N., & Kelly, A. (2001). Ready for life? The literacy achievements of Irish 15-year-olds with comparative international data. Dublin: Educational Research Centre.
- Singer, J. & Willett, J. (2003). Applied longitudinal data analysis: Modeling change and event occurrence. New York: Oxford University Press.
- Singley, D., Lent, R., & Sheu, H. (2010). Longitudinal test of a social cognitive model of academic and life satisfaction. *Journal of Career Assessment*, 18, 133-146.
- Sirin, S. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75, 417-453.
- Skeem, J. & Cauffman, E. (2003). Views of the downward extension: Comparing the Youth Version of the Psychopathy Checklist with the Youth Psychopathic Traits Inventory. *Behavioral Sciences and the Law*, 21, 737-770.
- Skrondal, A. & Rabe-Hesketh, S. (2003). Generalized latent variable modeling: Multilevel, longitudinal, and structural equation models. Florida: Chapman & Hall/CRC.
- Small, S. & Memmo, M. (2004). Contemporary models of youth development and problem prevention: Toward an integration of terms, concepts, and models. *Family Relations*, 53, 3-11.
- Smith, G. & Matthews, P. (2000). Science, technology and society in Transition Year: A pilot study. *Irish Educational Studies*, 19, 107-119.
- Smith, H. M., & Betz, N. E. (2000). Development and validation of a scale of perceived social self-efficacy. *Journal of Career Assessment, 8,* 283-301.
- Smith, H. M., & Betz, N. E. (2002). An examination of efficacy and esteem pathways to depression in young adulthood. *Journal of Counseling Psychology*, 49, 438-448.
- Smyth, E. (1999a). Do schools differ? Academic and personal development among pupils in the second-level sector. Dublin: Oak Tree Press/ESRI.
- Smyth, E. (1999b). Pupil performance, absenteeism and school dropout: A multi-dimensional analysis. School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice, 10, 480-502.
- Smyth, E. (2008). The Irish educational system: A note on classification. In S. L. Schneider (ed.), The international standard classification of education (ISCED-97): An evaluation of content and criterion validity for 15 European countries. Mannheim, Germany: MZES.
- Smyth, E. (2009). Buying your way into college? Private tuition and the transition to higher education in Ireland. Oxford Review of Education, 35 (1), 1-22
- Smyth, E., Banks, J. & Calvert, E. (2011). From Leaving Certificate to leaving school: A longitudinal study of Sixth Year students. Dublin: Liftey Press/ESRI.
- Smyth, E., Byrne, D., & Hannan, C. (2004). *The Transition Year programme: An assessment*. Dublin: Liffey Press/ESRI.
- Smyth, E. & Calvert, E. (2011). *Choices and challenges: Moving from junior cycle to senior cycle education*. Dublin: Liffey Press/ESRI.

References

- Smyth, E. & McCoy, S. (2009). Investing in education: Combating educational disadvantage. Dublin: Barnardos/ESRI.
- Smyth, E. & McCoy, S. (2011). *Improving second-level education: Using evidence for policy development*. Dublin: ESRI.
- Snijders, T. & Bosker, R. (2012). Multilevel analysis: An introduction to basic and advanced multilevel modeling (2nd ed.). London: Sage.
- Soutter, A., Gilmore, A., & O'Steen, B. (2011). How do high school youths' educational experiences relate to well-being? Towards a trans-disciplinary conceptualization. *Journal of Happiness Studies*, 12, 591-631.
- Stankov, L. & Lee, J. (2014). Quest for the best non-cognitive predictor of academic achievement. Educational Psychology: An International Journal of Experimental Educational Psychology, 34, 1-8.
- Steinberg, L. & Cauffman, E. (1996). Maturity of judgment in adolescence: Psychosocial factors in adolescent decision making. *Law and Human Behavior*, 20, 249-272.
- Steinberg, L., Elmen, J., & Mounts, N. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development*, 60, 1424-1436.
- Steinberg, L. & Morris, A. (2001). Adolescent development. Annual Review of Psychology, 52, 83-110.
- Steinberg, L. & Silverberg, S. B. (1986). The vicissitudes of autonomy in early adolescence. *Child Development*, 57, 841-851.
- Stiglbauer, B., Gnambs, T., Gamsjäger, M., & Batinic, B. (2013). The upward spiral of adolescents' positive school experiences and happiness: Investigating reciprocal effects over time. *Journal of School Psychology*, 51, 231-242.
- Stokes, H. & Wyn, J. (2007). Constructing identities and making careers: Young people's perspectives on work and learning. *International Journal of Lifelong Learning*, 26, 495-511.
- Streiner, D. (2003). Starting at the beginning: An introduction to coefficient alpha and internal consistency. *Journal of Personality Assessment*, 80, 99-103.
- Sturge-Apple, M., Davies, P., & Cummings, E. (2010). Typologies of family functioning and children's adjustment during the early school years. *Child Development*, 81, 1320-1335.
- Su, Y. & Reeve, J. (2011). A meta-analysis of the effectiveness of intervention programs designed to support autonomy. *Educational Psychology Review*, 23, 159-188.
- Suldo, S. M., Riley, K. N., & Shaffer, E. J. (2006). Academic correlates of children and adolescents' life satisfaction. *School Psychology International*, 27 (5), 567-582.
- Suldo, S. M. & Shaffer, E. J. (2007). Evaluation of the Self-Efficacy Questionnaire for Children in two samples of American adolescents. *Journal of Psychoeducational Assessment*, 25, 341-355.
- Suldo, S., Shaffer, E., & Riley, K. (2008). A social-cognitive-behavioral model of academic predictors of adolescents' life satisfaction. *School Psychology Quarterly*, 23, 56-69.
- Suldo, S., Thalji, A., & Ferron, J. (2011). Longitudinal academic outcomes predicted by early adolescents subjective well-being, psychopathology, and mental health status yielded from a dual factor model. *The Journal of Positive Psychology*, 6, 17-30.
- Symonds, J. & Gorard, S. (2010). Death of mixed methods? Or the rebirth of research as a craft. *Evaluation & Research in Education*, 23, 121-136.

Tabachnik, B. & Fidell, L. (2013). Using multivariate statistics (Sixth edition). Boston: Pearson.

- Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, 2, 53-55.
- Taylor, M. L. & Porath, M. (2006). Reflections on the International Baccalaureate program: Graduates' perspectives. *The Journal of Secondary Gifted Education*, 17, 21–30.
- Teddlie, C. & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research.* 1, 77-100.
- Teuscher, U. (2009). Subjective age bias: A motivational and information processing approach. *International Journal of Behavioral Development*, 33, 22-31.
- Thoonan, E., Sleegers, P., Peetsma, T., & Oort, F. (2011). Can teachers motivate students to learn? *Educational Studies*, 37, 345-360.
- Tian, L., Chen, H., & Huebner, E.S. (2014). The longitudinal relationships between basic psychological needs satisfaction at school and school-related subjective well-being in adolescents. *Social Indicators Research*, 119, 353-372.
- Tilton-Weaver, L., Vitunski, E., & Galambos, N. (2001). Five images of maturity in adolescence: what does "grown up" mean? *Journal of Adolescence*, 24, 143-158.
- Tomarken, A. & Waller, N. (2003). Potential problems with "well fitting" models. *Journal of Abnormal Psychology*, 112, 578-598.
- Tomarken, A. & Waller, N. (2005). Structural equation modelling: Strengths, limitations, and misconceptions. *Annual Review of Clinical Psychology*, 1, 31-65.
- Tormey, R. & Gleeson, J. (2012). Irish post-primary students' attitudes towards ethnic minorities. *Irish Educational Studies*, 31, 157-173.
- Tovey, H. & Share, P. (2003). A sociology of Ireland. Dublin: Gill & Macmillan.
- Transition Year Curriculum Support Service. (2000). *Transition Year survey on co-ordination: Report on findings.* Dublin: Blackrock Education Centre.
- Turner, P., Runtz, M., & Galambos, N. (1999). Sexual abuse, pubertal timing, and subjective age in adolescent girls: A research note. *Journal of Reproductive and Infant Psychology*, 17, 111-118.
- Usher, E. & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research*, 78, 751-796.
- Vallerand, R., Fortier, M., & Guay, F. (1997). Self-determination and persistence in a real-life setting toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, 72, 1161-1176.
- van Houtte, M. (2004). Why boys achieve less at school than girls: the difference between boys' and girls' academic culture. *Educational Studies*, 30, 159-173.
- van Ryzin, M., Gravely, A., & Roseth, C. (2009). Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *Journal of Youth and Adolescence*, 38, 1-12.
- Vandekeere, M. (2009). What children mean by well-being. In ChildON Europe Secretariat (Ed.), The on-going debate on the assessment of children's conditions of life: The proceedings of the ChildON Europe seminar on child well-being indicators (pp. 69-74). Florence: Istituto degli Innocenti. Retrieved 14 November 2012 from <u>http://www.childoneurope.org/issues/publications.htm</u>.

References

- Vecchio, G., Gerbino, M., Pastorelli, C., Del Bove, G. & Caprara, G. (2007). Multi-faceted self-efficacy beliefs as predictors of life satisfaction in late adolescence. *Personality and Individual Differences*, 43, 1807–1818.
- Voelkle, M. (2007). Latent growth curve modeling as an integrative approach to the analysis of change. *Psychology Science*, 49, 475-414.
- Wang, M., Chow, A., Hofkens, T., & Salmela-Aro, K. (2015). The trajectories of student emotional engagement and school burnout with academic and psychological development: Findings from Finnish adolescents. *Learning and Instruction*, 36, 57-65.
- Warner-Smith, P., Loxton, D., & Brown, W. (2007). Human resources for longitudinal studies: Matching people to skills and tasks. *International Journal of Multiple Research Approaches*, 1, 92-103.
- Watt, J. & van den Berg, S. (1995). Research methods for communication science. Boston: Allyn & Bacon.
- Watts, A.G., Jamieson, I., & Miller, A. (1989). School-based work experience: Some international comparisons. *British Journal of Education and Work*, 3, 33-47
- Wei, M., Russell, D., & Zakalik, R. (2005). Adult attachment, social self-efficacy, selfdisclosure, loneliness, and subsequent depression for freshman college students: A longitudinal study. *Journal of Counseling Psychology*, 52, 602-614.
- Wheeler, V. A., & Ladd, G. W. (1982). Assessment of children's self-efficacy for social interactions with peers. *Developmental Psychology*, 18, 795-805.
- White, M. (2016). Why won't it stick? Positive psychology and positive education. Psychology of Well-being, 6:2, 1-16.
- White, R. & Arzi, H. (2005). Longitudinal studies: Designs, validity, practicality, and value. *Research in Science Education*, 35, 137-149.
- White, M. & Waters, L. (2015). A case study of 'The Good School': Examples of the use of Peterson's strengths-based approach with students. *The Journal of Positive Psychology*, 10, 69-76.
- Whitley, A., Huebner, E., Hills, K. & Valois, R. (2012). Can students be too happy in school? The optimal level of school satisfaction. *Applied Research in Quality of Life*, 7, 337-350.
- Wigfield, A., Eccles, J., & Rodriguez, D. (1998). The development of children's motivation in school contexts. *Review of Research in Education*, 23, 73-118.
- Wilkinson, L., & the Task Force on Statistical Inference (1999). Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist*, 54, 594-604.
- Willett, J., Singer, J., & Martin, N. (1998). The design and analysis of longitudinal studies of development and psychopathology in context: Statistical models and methodological recommendations. *Development and Psychopathology*, 10, 395-426.
- Willms, J. (2003). Student engagement at school: A sense of belonging and participation. Paris: OECD.
- Willms, J., Friesen, S., & Milton, P. (2009). What did you do in school today? Transforming classrooms through social, academic, and intellectual engagement. (First National Report). Toronto: Canadian Education Association.
- Wolcott, H. (1994). Transforming qualitative data: Description, analysis, and interpretation. Thousand Oaks, CA: Sage.

- Wong, M. & Csikszentmihalyi, M. (1991). Motivation and academic achievement: The effects of personality traits and the quality of experience. *Journal of Personality*, 59, 539-574.
- World Bank (2015). Early childhood development. In World Bank Group, World Development Report 2015: Mind, Society, and Behavior (pp. 98-110). Washington, DC: World Bank. Retrieved 10 February 2016 from <u>https://openknowledge.worldbank.org/handle/10986/20597</u>.
- Wright, S. & Perrone, K. (2010). An examination of the role of attachment and efficacy in life satisfaction. *The Counseling Psychologist*, 38, 796-823.
- Wu, W., West, S., & Taylor, A. (2009). Evaluating model fit for growth curve models: Integration of fit indices from SEM and MLM frameworks. *Psychological Methods*, 14, 183-201.
- Wyn, J. (2009). *Touching the future: Building skills for life and work. Australian Education Review 55.* Melbourne: Australian Council for Educational Research.
- Yurek, L., Vasey, J. & Havens, D. (2008). The use of self-generated identification codes in longitudinal research. *Evaluation Review*, 32, 435-452.
- Zanutto, E. (2006). A comparison of propensity score and linear regression analysis of complex survey data. *Journal of Data Science*, 4, 67-91.
- Zebrowitz, L. & Montepare, J. (2000). Integrating social psychology and aging research: Toward a social-developmental theory of behavior. *Basic and Applied Social Psychology*, 22, 259-261.
- Zhang, L. (2011). Family, school and friends: Correlates of Canadian youth outcomes. *Child Indicators Research*, 4, 467-498.
- Zimmer-Gembeck, M., Chipuer, H., Hanisch, M., Creed, P., & McGregor, L. (2006). Relationships at school and stage-environment fit as resources for adolescent engagement and achievement. *Journal of Adolescence*, 29, 911-933.
- Zimmer-Gembeck, M. & Mortimer, J. (2006). Adolescent work, vocational development, and education. *Review of Educational Research*, 76, 537–566.
- Zimmerman, B. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist*, 25, 3-17.
- Zimmerman, B. (1995). Self-efficacy and educational development. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 202-231). New York: Cambridge University Press.
- Zimmerman, B. (2001). Theories of self-regulated learning and academic achievement: An overview and analysis. In B. Zimmerman and D. Schunk (eds.), *Self-regulated learning* and academic achievement: Theoretical perspectives. Second edition. (pp. 1-37). Mahwah, NJ: Lawrence Erlbaum Associates.
- Zullig, K., Huebner, E.S., & Patton, J. (2011). Relationships among school climate domains and school satisfaction. *Psychology in the Schools*, 48, 133-145.

Appendix A: List of items and scales administered

This appendix presents the items that were included in the questionnaire for the first wave of data collection in 2011.

The wording appears as presented to students. Where applicable, the available response options are provided beneath the associated items. The presentation of the response options, as administered to the students, can be seen in Appendix B.

With the exception of the grade-specific questions on Transition Year near the end of the questionnaire (and this appendix), all items were administered in an identical fashion to Third Year, Transition Year, and Fifth Year students.

RAPS engagement in learning

It is important to me to do the best I can in school I work very hard on my schoolwork When I'm doing homework or an exercise in class, I usually understand why I'm doing it A lot of the time I am bored in class I often come to class unprepared I don't try very hard in school Often, it's not clear to me what I'm supposed to be learning from my homework I pay attention in class

RAPS experience of teacher support

My teachers care about how I do in school

- My teachers are fair with me
- My teachers like talking to me
- My teachers treat me with respect

RAPS autonomous motivation

I do my schoolwork because I really want to understand what we are studying I do my schoolwork because I enjoy doing it

I only do my schoolwork because that's what I'm supposed to do

I do my schoolwork because I would get in trouble if I didn't

RAPS perceived competence

I am confident in my ability to learn at school I am capable of learning the things we are being taught at school

Response options:				
Not at all true	Not very true	Not sure	A bit true	Very true

PISA affective engagement

My school is a place where... I feel included in things I make friends easily I feel like I belong I feel awkward and out of place Other students seem to like me I feel happy I do not want to go I often feel bored

PISA student-teacher relations

My school is a place where...

Students get along well with most of the teachers Most of my teachers are interested in my well-being Most of my teachers really listen to what I have to say If I need extra help, I will get it from my teachers Most of my teachers treat me fairly

PISA school legacy

School has done little to prepare me for adult life when I leave school School has been a waste of time School has helped give me confidence to make decisions School has taught me things which could be useful in a job

<u>Response options:</u> Definitely disagree

Mildly disagree

Not sure

Mildly agree

Definitely agree

Social self-efficacy

How well can you express your opinions when your classmates disagree with you? How well can you become friends with other young people? How well can you have a chat with an unfamiliar person? How well can you work together with your classmates? How well can you tell other young people that they are doing something you don't like? How well can you tell a story of a funny event to a group of young people? How well do you succeed in staying friends with other young people?

Response options:						
1 (Not at all)	2	3	4 (Ok)	5	6	7 (Very well)

Subjective age

Compared to most people my age, most of the time I feel... Compared to most people my age, most of the time I look... Males my age act towards me as if I am... Females my age act towards me as if I am...

Choose 1 if your answer is	<u>a lot younger</u> than my age.
Choose 2 if your answer is	<u>younge</u> r than my age.
Choose 3 if your answer is	<u>a little bit younger</u> than my age.
Choose 4 if your answer is	<u>the age I am</u> .
Choose 5 if your answer is	<u>a little bit older</u> than my age.
Choose 6 if your answer is	<u>older</u> than my age.
Choose 7 if your answer is	<u>a lot older</u> than my age.

Response options:						
1 (Younger)	2	3	4 (Same age)	5	6	7 (Older)

Psychosocial maturity

Self-reliance

I would be more successful if I wasn't unlucky I feel uncomfortable if I disagree with what my friends think Most things that happen to me depend on luck You can't be expected to be successful if you had a bad childhood I think I tend to go along with the wishes of others When things go badly for me, it's usually because of something I couldn't do anything about When I do something wrong I depend on my parents to fix it Someone often has to tell me what to do

Work orientation

I often leave my homework unfinished

I hate to admit it, but I give up on my work when things are going badly.

I believe in working only as hard as I must to get by

I find it hard to keep at anything that takes a long time to do

I often forget work I am supposed to be doing

I like working on things that take a lot of effort

Response options:				
Strongly disagree	Mildly disagree	Not sure	Mildly agree	Strongly agree

Global life satisfaction

I have what I want in life I have a good life My life is going well I wish I had a different kind of life My life is better than most teenagers' My life is just right I would like to change many things in my life

Self life satisfaction

There are lots of things I can do well I like to try new things Most people like me I like myself

School life satisfaction

I enjoy school activities I learn a lot at school School is interesting I look forward to going to school

Response options: Definitely disagree Mildly agree

Moderately disagree Moderately agree Mildly disagree Definitely agree

Leaving Certificate subjects

Please list the exam subjects you plan to study for the Leaving Certificate. (If you plan to do LCVP, please write *LCVP*' as one of your subjects.)



Homework and study behaviours

Thinking of your homework over the last few weeks, how frequently do you...

- ... revise with bullet points or flash cards?
- ... give up on a question because it's hard?
- ... practice exam questions?

...not do homework given by your teachers?

- ... think of different ways to solve a problem?
- ...do extra study?

Response options:

Rarely/never	A few times a month	Once a week	2-3 times a week	Every day
1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ii ien uniteo a monun	o nee a ween		

Time spent on homework and study

In a normal week, about how much time do you spend on schoolwork/revision at home?

_____ hours _____ minutes

Plans for life after school

When you leave school, do you think you will...

(please fill in one answer)

\square_1
\square_2
\square_3
\Box_4

Thoughts on desired job later in life

Do you know what job you would like when you are older? (please fill in one answer)

Yes – I am sure	\Box_1
Maybe – I think so	\square_2
Maybe – I have an idea but am not sure	\square_3
No – I don't really know	\square_4
No – I haven't thought about it	\square_5

Educational aspirations

Which of these qualifications would you like to complete?

(please choose <u>one</u> answer only)

(if you are unsure what the different options are, please ask your teacher)

Leaving Cert.	\Box_1
A Post-Leaving Cert. course / apprenticeship	\square_2
A third level certificate/diploma (not to degree level)	\square_3
A degree	\square_4
Don't know	\square_5

Parental education

Which of these qualifications do your mother and father have? *(please tick all that apply)*

	Mother	Father
Did not complete primary school	\Box_1	\Box_1
Primary school	\square_2	\square_2
Lower secondary school (e.g. Junior / Inter Cert.)	\square_3	\square_3
Upper secondary school (e.g. Leaving Cert.)	\Box_4	\Box_4
A third level certificate/diploma		
(not to degree level)	\square_5	\square_5
A degree or postgraduate degree	\square_6	\square_6
Don't know	\square_7	

Home language

What language do you speak at home most of the time?

English	\Box_1
Irish	\square_2
Another language	\square_3

For Third Year students only

Ideally, what would you like to do in a Transition Year? Why?

Do you think Transition Year is a good experience (e.g., from what you've heard)?

Yes	- it's good in my school	\Box_1
Maybe	- it's good in some schools, but not in my school	\square_2
No	- it's not a good experience	\square_3

Please explain your answer.

Do you think you will take part in Transition Year next year?

Yes \square_1 No \square_2 Don't know \square_3

Please explain.

For Transition Year students only

(a) D	o you thin	ık Transition Y	ear is an	<i>enjoyable</i> year	?		
Response opt	ions:						
1 (Not very er	njoyable)	2	3	4 (Ok)	5	6	7 (Very enjoyable)
(b) D	o you thir	nk Transition Y	ear is a <i>i</i>	<i>useful</i> year (e.ş	g., have	you lear	ned much)?
Response opt	ions:						
1 (Not very us	seful)	2	3	4 (Ok)	5	6	7 (Very useful)
(c) O_i	<i>verall</i> , are y	ou happy with	your Tra	ansition Year	r experie	ence?	
Response opt	ions:						
Very unhappy		Unhappy		Not satisfied		Not si	ure
Satisfied	Нарру		Very ha	ppy			

Please explain.

Would you recommend Transition Year in your school to 3^{rd} year students? Yes \Box_1 No \Box_2

Please explain why or why not.

For Fifth Year students only

Did you do Transition Year? Yes \square_1 No \square_2

If you did not do Transition Year:

Are there any parts of TY that you would have liked to take part in?

If you did Transition Year:

(a) Were you happy with your Transition Year experience?

Response options:

Very unhappyUnhappyNot satisfiedNot sureSatisfiedHappyVery happy

(b) What were the best things about TY?

(c) What were the worst things about TY?

How true do you think the following statements are for you? Because I did Transition Year...

> I am better at organising / managing things It took me a long time to get into a routine in 5th year I know more about what I want to do after school It's hard to catch up to classmates who skipped TY I made a better choice of Leaving Cert. subjects I have made good friends I find it harder to pay attention in class I learned how to work as part of a team I feel like I've wasted a year I have learned a new skill outside school I see more practical uses for things I learn in school I think it's harder to learn for the Leaving Cert. I am more confident about trying new things

Response options:				
Not at all true	Not very true	Not sure	A bit true	Very true

Would you recomm	nend Tran	sition Yea	ar in your scho	ool to 3	rd year studer	its?
	Yes	\square_1	No	\square_2		
Please explain.						

Access to examination results

(presented to all year groups)

Follow-on study

As this study progresses, the Educational Research Centre would like to be able to match your Junior Certificate or Leaving Certificate results to the information you have provided here. This information will be used to create a nationwide average of all students around the country. **Neither you nor your school will be identified individually.**

- If you <u>agree to allow</u> the Educational Research Centre to confidentially access your Junior Certificate / Leaving Certificate results for research purposes, please tick here.
- If you **do not allow** the Educational Research Centre to confidentially access your Junior Certificate / Leaving Certificate results for research purposes, please tick here.

This appendix presents the items that were presented in discrete scales in Appendix A in the format that Third Year students saw them for the first wave of data collection in 2011.

With the exception of the open-ended grade-specific questions at the end of the questionnaire (described in Appendix A), Transition Year and Fifth Year students saw the same questionnaire.

Educational Research Centre St Patrick's College, Dublin

Second level student survey (2011)

Questionnaire for Third Year students

You do not need to write your name anywhere on this booklet. Instead, your answers will be analysed with an anonymous ID code which is unique to you.

Your ID code is made from:

- 1. your date of birth,
- 2. the number of **older brothers** you have (<u>do not count</u> any younger brothers)
- 3. your gender (male or female), and
- 4. the first letter of your first name (e.g., <u>D</u> for <u>D</u>avid, or <u>A</u> for <u>A</u>nne-Marie).

It is important that you fill in <u>all</u> of the details to make your code.

It will be used to compare your opinions now with your opinions next year (because it will stay the same from year to year).

Example:

A male student named John, who was born on 16/06/1995 and has no older brothers would...

✓ write '16/06/1995'
 ✓ write '0'
 ✓ write 'J'

for **Date of birth** for **Older brothers.** for **Initial of first name**. for **Gender**.

✓ write 'M'

So his unique, anonymous ID code is 1606950JM.

Now, please fill in your unique ID code here:

Date of birth	// 199
Older brothers	
Initial of first name	
Gender (M / F)	

For some questions in this booklet you will be shown a list of statements, and asked to tick one box next to each statement to show what you think.

For example, for the statement 'My teachers are fair with me':

- If you think your teachers are unfair, tick the box under *Not true at all* or *Not very true*.
- If you think they are fair with you, tick *A bit true or Very true*.

If you're not sure, just choose the answer you think is best. If you make a mistake, put an X through the wrong answer and mark the answer you want.

Other questions, near the end of the booklet, will ask you to write a short answer to explain your opinion. For these questions, write as much as you like.

Please answer the questions as honestly as possible.

They refer to <u>your</u> opinions and attitudes. It is not a test.

There is no 'correct' outcome – I am interested in finding out about things as they really are.

The answers you provide will be used (averaged with other students' responses) to report on aspects on the Irish school system.

Tick one box next to each statement to show how much you agree or disagree with it. If you're not sure, just choose the answer you think is best.

If you make a mistake, put an X through the wrong answer and mark the answer you want.

	Not at all true	Not very true	Not sure	A bit true	Very true
1. It is important to me to do the best I can in school	\Box_1	\square_2	D 3	\Box_4	\square_5
2. I work very hard on my schoolwork	\Box_1	\square_2	D 3	\Box_4	\Box_5
3. My teachers care about how I do in school	D 1	D 2	D 3	\Box_4	\Box_5
4. I am confident in my ability to learn at school	D 1	D ₂	D 3	\Box_4	
5. My teachers are fair with me	\Box_1	\square_2	D 3	\Box_4	\square_5
6. When I'm doing homework or an exercise in class, I usually					
understand why I'm doing	\Box_1	\square_2		\Box_4	
it	L 1	L 2	U 3	₩4	\square_5
7. A lot of the time I am bored in class	D 1	D 2	D 3	•4	
8. I do my schoolwork because I really want to understand what we are studying		\Box_2	D 3	4	\square_5
9. My teachers like talking to me		\square_2	D 3	\Box_4	\Box_5
10. I do my schoolwork because I enjoy doing it		D 2	D 3	\Box_4	
11. I often come to class unprepared		\square_2	D 3	\Box_4	
12. I am capable of learning the things we are being taught at school	\Box_1	\Box_2	\square_3	\Box_4	\Box_5
13. I don't try very hard in school		D 2	D 3	4	
14. I only do my schoolwork because that's what I'm supposed to do	D 1	\square_2	D 3	•4	\square_5
15. I do my schoolwork because I would get in trouble if I didn't		\square_2	D 3	\Box_4	
16. My teachers treat me with respect		D 2	D 3	\Box_4	
17. Often, it's not clear to me what I'm supposed to be learning from my homework	\Box_1	\Box_2	D 3	4	\square_5
18. I pay attention in class	\Box_1	\square_2	D 3	\Box_4	\square_5
	Not at all true	Not very true	Not sure	A bit true	Very true

First, here are some questions about your opinions and attitudes to school.

Next, here are some questions about you.

	Not at	tall		Ok		Very	well
19. How well can you express your opinions when your classmates disagree with you?	D 1	D 2	D 3	4	D 5	D 6	D 7
20. How well can you become friends with other young							
people?	D 1	D ₂	D 3	Q 4	D 5	D 6	D 7
21. How well can you have a chat with an unfamiliar person?	D 1	D 2	D 3	\Box_4		\Box_6	D 7
22. How well can you work together with your classmates?	D 1	\square_2	D 3	4		\Box_6	D 7
23. How well can you tell other young people that they are doing something you don't like?	D 1	D 2	D 3	4	D 5	D 6	D 7
24. How well can you tell a story of a funny event to a group of young people?	D 1	D 2	D 3	4	D 5	D 6	D 7
25. How well do you succeed in staying friends with other young people?	D 1	D 2	D 3	4	D 5	D 6	D 7

For the next four questions:

Choose 1 if your answer is	<u>a lot younger</u> than my age.
Choose 2 if your answer is	<u>younge</u> r than my age.
Choose 3 if your answer is	<u>a little bit younger</u> than my age.
Choose 4 if your answer is	<u>the age I am</u> .
Choose 5 if your answer is	a little bit older than my age.
Choose 6 if your answer is	<u>older</u> than my age.
Choose 7 if your answer is	<u>a lot older</u> than my age.

	Youn	ger		Same age			Older
26. Compared to most people my age, most of the time I feel	D 1	D 2	D 3	\Box_4	\Box_5	\square_6	D 7
27. Compared to most people my age, most of the time I look	D ₁	D 2	D 3	4	D 5	\square_6	D 7
28. Males my age act towards me as if I am	D 1	D 2	D 3	4	D 5	\square_6	D 7
29. Females my age act towards me as if I am	\Box_1	D 2	D 3	4	D 5	\square_6	D 7

These questions are about your plans for the future.

30. Please list the exam subjects you plan to study for the Leaving Certificate.

(If you plan to do LCVP, please write 'LCVP' as one of your subjects.)



31. When you leave school, do you think you will...

(please fill in one answer)

take a year out?	\Box_1
look for a full-time job?	\Box_2
go to further training or education?	D 3
Don't know.	\Box_4

32.	Do you know what job you would like when you are older?	(please fill in one answer)
	Yes – I am sure	\Box_1
	Maybe – I think so	\Box_2
	Maybe – I have an idea but am not sure	\square_3
	No – I don't really know	\Box_4
	No – I haven't thought about it	\square_5

Next, here are some general questions about you.

	Strongly disagree	Mildly disagree	Not sure	Mildly agree	Strongly agree
33. I would be more successful if I wasn't unlucky	D 1	D ₂	D 3	\Box_4	\square_5
34. I feel uncomfortable if I disagree with what my friends think.	D 1	D 2	D 3	\Box_4	
35. Most things that happen to me depend on luck	\Box_1	\square_2	D 3	\Box_4	\Box_5
36. I often leave my homework unfinished	D 1	\square_2	D 3	4	\square_5
<i>37</i> . I hate to admit it, but I give up on my work when things are going badly	D 1	\Box_2	D 3	\Box_4	\square_5
38. You can't be expected to be successful if you had a bad childhood	D 1	\Box_2	D 3	\Box_4	\square_5
39. I believe in working only as hard as I must to get by	D 1	\square_2	D 3	\Box_4	
40. I think I tend to go along with the wishes of others	D 1	\square_2	D 3	\Box_4	
41. I find it hard to keep at anything that takes a long time to do	\Box_1	\square_2	D 3	\Box_4	\Box_5
42. When things go badly for me, it's usually because of something I couldn't do anything about	D 1	\Box_2	D 3	\Box_4	\square_5
<i>43</i> . When I do something wrong I depend on my parents to fix it	\Box_1	\Box_2	D 3	4	\square_5
44. Someone often has to tell me what to do	D 1	D ₂	D 3	\Box_4	\Box_5
45. I often forget work I am supposed to be doing	\Box_1	\square_2	D 3	\Box_4	\square_5
46. I like working on things that take a lot of effort	D 1	D ₂	D 3	\Box_4	\square_5
	Strongly disagree	Mildly disagree	Not sure	Mildly agree	Strongly agree

Now, think about your life <u>during the past few weeks</u>. Here are some questions that ask you about your satisfaction with different parts of your life.

	Definitely disagree	Moderately disagree	Mildly disagree	Mildly agree	Moderately agree	Definitely agree
47. I have what I want in life	\Box_1	\Box_2	D 3	\Box_4	\Box_5	\square_6
48. I enjoy school activities	D 1	\square_2	D 3	\Box_4	\Box_5	\square_6
<i>49.</i> There are lots of things I can do well	\Box_1	\square_2	D 3	4	\square_5	\square_6
50. I learn a lot at school	\Box_1	\square_2	D 3	\Box_4	\Box_5	\square_6
51. I have a good life		\square_2	D 3	\Box_4		\square_6
<i>52.</i> I would like to change many things in my life		\Box_2	D 3	4	\square_5	\Box_6
53. My life is going well	\Box_1	\square_2	D 3	\Box_4	\Box_5	\square_6
54. I like myself		\square_2	D 3	\Box_4		\square_6
55. My life is better than most teenagers'		\Box_2	D 3	4	\square_5	\Box_6
56. School is interesting	\Box_1	\square_2	D 3	\Box_4	\Box_5	\Box_6
57. I look forward to going to school		\square_2	D 3	4	\Box_5	\square_6
58. I like to try new things		\square_2	D 3	4	\Box_5	\square_6
59. My life is just right		\square_2	D 3	\Box_4	\Box_5	\square_6
60. Most people like me		\square_2	D 3	\Box_4	\Box_5	\square_6
61. I wish I had a different kind of life		\square_2	□3	\Box_4	\Box_5	\square_6
	Definitely disagree	Moderately disagree	Mildly disagree	Mildly agree	Moderately agree	Definitely agree

62. Thinking of your <u>homework over the last few weeks</u> , how frequently do you	Rarely / never	A few times a month	Once a week	2-3 times a week	Every day
a)revise with bullet points or flash cards?	D ₁	\square_2	\square_3	\Box_4	\square_5
b)give up on a question because it's hard?	D ₁	\square_2	\square_3	\Box_4	\Box_5
c)practice exam questions?	D ₁	\square_2	\square_3	\Box_4	\square_5
d)not do homework given by your teachers?	D ₁	\square_2	\square_3	\Box_4	\Box_5
e)think of different ways to solve a problem?	D ₁	\square_2	\square_3	\Box_4	\square_5
f)do extra study?	D ₁	\square_2	D 3	\Box_4	\Box_5

63. In a normal week, about how much time do you spend on schoolwork/revision at home?

_____ hours _____ minutes

My school is a place where... Definitely Mildly Not Mildly Definitely disagree disagree agree sure agree 64. I feel included in things \Box_1 \Box_5 \Box_2 **D**3 \Box_4 65. I make friends easily \Box_1 \square_2 **D**3 \Box_4 \Box_5 66. I feel like I belong..... \Box_1 \square_2 \square_3 \Box_4 \Box_5 67. I feel awkward and out of place \Box_1 \Box_2 **D**3 \Box_4 \Box_5 68. Other students seem to like me..... \Box_1 \square_2 **D**3 \Box_4 \Box_5 69. I feel happy \Box_1 \square_2 \square_3 \Box_4 \Box_5 70. I do not want to go \Box_1 \Box_2 **D**3 \Box_4 \Box_5 71. I often feel bored..... \Box_1 \square_2 **D**3 \square_4 \Box_5 72. Students get along well with most of the teachers \Box_1 \square_2 \square_3 \Box_4 \Box_5 73. Most of my teachers are interested in my well-being \Box_1 \Box_2 **D**3 \Box_4 \Box_5 74. Most of my teachers really listen to what I have to say. \Box_1 \square_2 \square_3 \Box_4 75. If I need extra help, I will get it from my teachers \Box_1 \Box_5 \square_2 **D**3 \Box_4 76. Most of my teachers treat me fairly **D**3 \Box_1 \Box_2 \Box_4 \Box_5

Thinking about your life at school, please answer these questions.	

Thinking about <u>what you have learned in school</u> , how much do you disagree or agree that…	Definitely disagree	Mildly disagree		Mildly agree	Definitely agree
77. School has done little to prepare me for adult life when I leave school	\Box_1	\Box_2	D 3	\Box_4	\Box_5
78. School has been a waste of time	D 1		D 3	4	D 5

79. School has helped give me confidence to make decisions	D 1	D 2	D 3	\Box_4	\square_5
<i>80</i> . School has taught me things which could be useful in a job	\Box_1	\square_2	D 3	4	\Box_5

The final questions are about you, and your views on Transition Year.

81. Which of these qualifications would you like to complete? (please choose <u>one</u> answer only)

(if you are unsure what the different options are, please ask your teacher)

Junior Cert.	\Box_0
Leaving Cert.	\Box_1
A Post-Leaving Cert. course	
/ apprenticeship	\square_2
A third level certificate/diploma	
(not to degree level)	D 3
A degree	\Box_4
Don't know	\Box_5

82. Which of these qualifications do your mother and father have? (please tick all that apply)

	Mother	Father
Did not complete primary school	\Box_1	D ₁
Primary school	\square_2	\square_2
Lower secondary school (e.g. Junior / Inter Cert.)	D 3	\square_3
Upper secondary school (e.g. Leaving Cert.)	4	\Box_4
A third level certificate/diploma		
(not to degree level)	\square_5	\Box_5
A degree or postgraduate degree	\square_6	\square_6
Don't know	\Box_7	\Box_7

83. What language do you speak at home most of the time?

English	\Box_1
Irish	\Box_2
Another language	\square_3

84.	84. Ideally, what would you like to do in a Transition Year? Why?				
85.	. Do you think Transition Year is a good experience (e.g., from what you've I	neard)?			
	Yes - it's good in my school	\Box_1			
	Maybe - it's good in some schools, but not in my school	\square_2			
	No - it's not a good experience	D 3			
	Please explain your answer.				
86.	. Do you think you will take part in Transition Year next year?				
	Yes \Box_1 No \Box_2 Don't know \Box_3				
	Please explain.				

Follow-on study

As this study progresses, the Educational Research Centre would like to be able to match your Junior Certificate or Leaving Certificate results to the information you have provided here. This information will be used to create a nationwide average of all students around the country.

Neither you nor your school will be identified individually.

If you <u>agree to allow</u> the Educational Research Centre to confidentially access your Junior Certificate / Leaving Certificate results for research purposes, please tick here:	D ₁
 If you <u>do not allow</u> the Educational Research Centre to confidentially access your Junior Certificate / Leaving Certificate results for research purposes, please tick here:	D 2

That's it! Thank you again - your help is very much appreciated.

Appendix C: Information for students

Information sheet

- This survey is being conducted by the Educational Research Centre (St Patrick's College, Dublin). The aim is to investigate students' attitudes and opinions about school and about the Transition Year programme.
- **2.** There are two parts to the study:
 - This year, a questionnaire is being given to students (in 3rd year, in Transition Year, and in 5th year) in a number of schools around the country.
 - ii) Another questionnaire will be given to the same students that's you in one year's time (in 2012), and one year after that (in 2013). By asking the same people to participate again rather than finding new students each time, we will be able to examine how your opinions change as you move through school.
- 3. This research is the first assessment of its type in Ireland. It will provide important information for the Minister for Education and Skills and for schools on how current students view the education system. It will let them know your opinions about school life, and will also help to identify things about Transition Year that work well and things that could be improved or changed (even if you haven't done Transition Year).

The results will also be useful to future Junior Certificate students who are considering Transition Year, and to their parents who may wonder whether the extra year will be useful.

- 4. The answers you give will be kept <u>completely confidential</u>, and will be stored securely at St Patrick's College. Your answers will be <u>completely anonymous</u>, and you will never be identified individually.
- 5. Your involvement in this study is voluntary you can withdraw at any time. There is no penalty for withdrawing before all sections of the study have been completed.
- 6. The survey should take no more than one class period to complete.

If you have any questions about the research (even if you have already completed the survey) please contact:

Aidan Clerkin Educational Research Centre St Patrick's College Drumcondra Dublin 9

Tel: (01) 8065218 Email: <u>ty@erc.ie</u>

If you have concerns about this study and wish to speak to an independent person with no involvement in the research, please contact:

The Administrator, Office of the Dean of Research and Humanities, St Patrick's College, Drumcondra, Dublin 9.

Tel: (01) 8842149

Please keep this sheet so that you have this information and the contact details whenever you may want them.

Thank you very much for your help.

Informed Consent Form

- **a.** This survey is part of an investigation of student attitudes towards school and Transition Year.
- **b.** It is organised by the Educational Research Centre (St Patrick's College, Dublin).
- **c.** If you agree to participate in this study you will answer the questions on the attached questionnaire. Those answers will be sent straight to the Educational Research Centre, where they will be analysed using anonymous ID codes.
- d. Agreement to take part in this study is voluntary you can withdraw from participation at any time. There will be no penalty for withdrawing before all parts of the study have been completed.
- e. All of your answers will be kept <u>completely confidential</u>. They will be stored securely at St Patrick's College.
- f. Your answers are <u>completely anonymous</u>. You do not need to write your name anywhere on the questionnaire.
- g. You can contact the researcher, Aidan Clerkin, at any time if you have questions about the survey. His contact details are included on the Information Sheet.

Signature:

I have read the information in this form.

The researcher has provided contact details on the Information Sheet, which I can use to contact him at any time with any questions or concerns.

I understand that I can withdraw from the study at any time.

I consent to take part in this research project.

Signature:	
Date of birth:	//
Today's date:	//

Appendix E: Description of pilot study

Preceding the main study, a pilot study was carried out in October 2010. The aims of the pilot were to gauge the suitability of the student questionnaires in terms of:

- length (students should be able to complete the questionnaire comfortably within one class period – approximately 30 minutes).
- comprehension (the phrasing and vocabulary should be pitched at a suitable level for students).
- instructions (students should be able to follow without difficulty what is being asked of them).

Two schools took part in the pilot study – one in Co. Meath, and one in Co. Kildare. Transition Year in one of the schools was compulsory; in the other, it is an optional programme for students. In both schools, one class group at each of Third Year, Transition Year, and Fifth Year took part in the survey. The questionnaires were administered by the researcher to three class groups, and by the usual class teacher to the other three. For all class groups, both the researcher and the teacher were present at all times.

Students were first given an information sheet explaining the aims of the study, and were asked to read the information before reading the informed consent form. The purpose of the pilot study was also explained verbally. Students were encouraged to report anything that they found confusing, pointless, or otherwise didn't like about the questionnaires. The confidential, anonymous, and voluntary nature of the research was made clear, and students were assured that they could withdraw from the study at any time without penalty. The class teacher and the researcher circulated to ensure that students understood the information about the study and the informed consent form, and to answer questions arising from the questionnaire.

After these measures were taken, 136 students (100%) consented to take part in the research. Participating numbers were similar across the three grade levels, although female students outnumbered male students by almost three to one (Table E.1).

		•	, ,	
	Third	ΤY	Fifth	
Male	11	15	10	36
Female	32	28	40	100
	43	43	50	

Table E.1: Profile of pilot study respondents

E.1 Observations from pilot study

Teachers in both schools were enthusiastic about the study, citing the need for up-to-date information on Transition Year and for research on student development. It was felt by teachers that the questionnaires were broadly pitched at the right level for students, but that it may need to be shortened slightly to alleviate time pressure for slower readers.

The time taken for students to complete the questionnaires – including time to read the information sheet and consent form, and to ask any questions of teachers or the researcher – ranged from 20 to 40 minutes. Virtually all students were finished in under 30 minutes in one of the schools; in the second school, there appeared to be a greater range of reading ability and the administration was quite tiring for some students.

E.2 Students' views on pilot study

In both schools, most students appeared to engage well with the questionnaires. This was particularly evident among Transition Year and Fifth Year students, who spent the majority of the available time working independently or seeking clarification from the teacher on certain items, with little distraction in the classroom. Several days after the pilot study, the students of one school were asked to complete a short evaluation form, which had been left with the teacher by the researcher on the day of administration, with any comments or criticisms of the survey that they had. Four specific questions were asked, seeking comments on the length of the questionnaires (for example, whether they were too long or too short), on any questions that were confusing or unclear, on anything that was particularly liked or disliked about the survey, and any other comments that the student would like to make. (Similar evaluation forms were left with the second school, but were not returned to the researcher.)

The main problem identified by students was with the length of the questionnaire. 63% of respondents reported that the time taken to complete the questionnaire was *too long* for them, while 37% said that it was *ok*. No-one regarded it as being *too short*. Accompanying comments from some students suggested that the questions in the survey retained their interest in most cases, but that they ran out of time towards the end.

Seventeen students – approximately one-third of those who returned evaluation sheets – indicated that they found something in the questionnaire confusing. In most cases, when this was elaborated on by the student, the confusion was confined to only one question, with little overlap on identified questions between students. The single issue which was commented on by a number of students was their uncertainty regarding the level of educational qualification attained by their parents.

When asked whether there was anything about the survey that they particularly liked or disliked, 45% of students identified at least one feature which they liked, 26% identified a disliked feature, and 29% gave mixed or indifferent answers (such as, "No, nothing particularly"). Positive answers tended to centre on an appreciation that the research was asking for their thoughts and gave them a chance to express their opinions on their school and Transition Year. Students also praised the range of topics covered, and in some cases participation in the survey was seen as a useful exercise in personal reflection on their year in school. The two issues that were identified as being disliked by students were the length of time the questionnaire took to complete and, on a related note, the fact that the bubbles provided for response options had to be filled in completely (in order to be read by the optical scanning software that was used to read in the pilot study data), which was seen as tedious.

About one-quarter of students took up the option of providing a final comment about whatever they chose. In most cases, these comments reinforced praise or criticism made in previous sections – for example, that the questionnaire should be made a bit shorter, or that the student found it to be an interesting exercise to complete.

E.3 Scale reliabilities in pilot study

The internal consistency of the scales, as administered to the pilot study sample in 2010, is shown in Table E.2. More complete details on the content of the selected scales, including the wording of sample items and their use in previous research, as well as internal consistency values for the main study sample, are provided in Chapter 3.

As shown in Table E.2, the internal consistency of the scales presented in the pilot study was found to be satisfactory in a number of cases: school satisfaction, self satisfaction, global satisfaction, social self-efficacy, engagement in learning, school belonging, PISA student-teacher relations, and RAPS experience of teacher support. For the adjusted 'priority' scale for RAPS experience of teacher support – a subset of three items from the full eight-item scale, identified as priority items by the test developers, plus one item written for this pilot study – internal consistency was lower, but acceptable.

Internal consistency was somewhat less satisfactory for some scales – subjective age, self-reliance, and autonomous motivation – and problematic for others: PISA school legacy, perceived competence, work orientation, and personal responsibility (representing self-reliance and work orientation). Comments made by students to some items suggested instances where amendments would be useful in clarifying the question, or where questions were seen as 'not making sense' and distracting students. The omission of some items that were identified as problematic or distracting led to a reduced six-item work orientation scale and a smaller personal responsibility scale.

Scale	N items	Response format	N student responses	Cronbach's alpha	Item revisions made following pilot study
School belonging (PISA)	8	5-point scale	128	.70	
Student-teacher relations (PISA)	5	5-point scale	129	.87	
School legacy (PISA)	4	5-point scale	130	17	
Experience of teacher support (RAPS)	8	5-point scale	123	.78	Wording to one item amended following
Experience of teacher support (RAPS) (priority)	4	5-point scale	128	.69	student comments. One additional item included with scale, following trial.
Engagement in learning (RAPS)	8	5-point scale	125	.80	
Autonomous motivation (RAPS)	4	5-point scale	127	.66	
Perceived competence (RAPS)	2	5-point scale	131	.54	
Social self-efficacy	7	7-point scale	125	.78	
Personal responsibility	19	5-point scale	121	.60	Five items dropped following student
Personal responsibility (reduced)	14	5-point scale	124	.69	comments and poor psychometric properties.
Work orientation subscale	10	5-point scale	128	.35	Four items dropped following student
Work orientation subscale (reduced)	6	5-point scale	131	.61	comments and poor psychometric properties.
Self-reliance subscale	9	5-point scale	126	.63	One item dropped following student comments (no change to pilot study alpha).
Subjective age	4	7-point scale	135	.66	. , . ,
Global life satisfaction	7	6-point scale	130	.83	
Self life satisfaction	4	6-point scale	133	.76	
School life satisfaction	4	6-point scale	133	.76	

Table E.2: Summary characteristics of the psychosocial scales trialled in the 2010 pilot study

One point of surprise was that the four items labelled 'school legacy', drawn from the PISA student questionnaire, did not cohere as expected in this pilot study. A Cronbach's alpha of -.17 would normally be taken to suggest that the constituent items are measuring different constructs and should not be put together. The data were re-checked for possible errors in the scoring of the individual items (two of which were reverse-scored) and in the construction

of the overall scale. No problems were found in this regard. However, the same set of items showed acceptable internal consistency when previously used in the PISA 2009 dataset ($\alpha = .73$), which was based on responses from almost 4000 15-year-old students in Ireland. This group represents a major, and recent, Irish-based sample that is very similar in age to that targeted by the current study, and thus provides strong independent support for the validity of the use of the scale in this context, despite the reservations otherwise engendered by the problems apparent in this pilot study.

The most likely explanation for the scale's poor internal consistency in the pilot study might be its placement at the end of the comparatively long piloted version of the questionnaire, which could have contributed to students' not reading the items properly. As noted above, the questionnaire was shortened for the main study in response to concerns about its length. For this reason, and due to external corroborating evidence for its utility (PISA 2009), it was decided to retain the school legacy scale for the first wave of main data collection in March/April 2011 with a view to reviewing the psychometric properties of the scale at that point for future waves.

E.4 Trial of self-generated identification code

The evaluation form provided to students after the pilot study (see E.2, above) asked students to fill in a self-generated identification code (SGIC). For the pilot study, the structure of the SGIC on the evaluation forms was the same as that used on the piloted questionnaires. Namely, the SGIC was constructed from students' date of birth, the initial of their first name, and their gender. The use of the SGIC on two separate documents in the pilot study (the questionnaire in the first instance, and the evaluation form that was provided later) was designed to act as an early check on the reliability of the SGIC.

The ID codes provided on completed questionnaires were compared with the ID codes on completed evaluation forms for mismatches. 54 completed evaluation forms were received. A first attempt to match the ID codes on these forms with the corresponding ID codes on the questionnaires obtained 50 identical matches (92.6% match rate). A data entry error, caused by the scanning software failing to pick up one questionnaire ID, was identified and corrected, increasing the direct match rate to 94.4%.

An 'off-one' procedure (Faden et al., 2004; Grube, Morgan & Kearney, 1989; Yurek, Vasey & Havens, 2008) was then implemented to identify whether the three mismatched evaluation IDs paired with any of the remaining questionnaire IDs. That is, if the unmatched evaluation ID codes differed from potentially-matching – i.e., within school and grade level – unmatched questionnaire ID codes on only one of the constituent attributes (day, month, year of birth, initial, gender), the two codes were paired. This technique successfully paired the remaining three ID codes, resulting in an overall off-one match rate of 100%.

E.5 Adjustments made for main study

In a number of cases, problems identified during the pilot study led to changes in items or the design of the questionnaire for the main study. The major changes for the main study were:

- a revised presentation of the Likert response options (instead of bubbles to be completely filled in for scanning, which students found tedious and occasionally problematic in the pilot study, the response options were changed to boxes which were to be ticked for subsequent manual data entry),
- the omission of some low-priority items to ensure that the questionnaire was not overly long, and
- additional clarification was provided in the instructions for some items, including a reminder that students could ask their teachers if they were unsure what a question referred to (e.g., the difference between a third-level certificate/diploma and a degree).

E.6 Feedback to schools

After analysis of the pilot study data was completed, a letter was sent to the principals thanking them for their school's participation. An overview of their students' (Third, Transition, and Fifth Year) thoughts on the Transition Year programme was also provided as a gesture of appreciation, and as a source of information for the Transition Year coordinator. As the questionnaires were completed early in the school year, in October, a caveat that Transition Year students would have started the programme only recently was included.

The letter contained an aggregated description of TY students' levels of satisfaction with the programme so far, and Fifth Year students' thoughts on whether or not they would recommend TY to other students. An additional document was also included that summarised (anonymously) some of the prevailing themes to emerge from the open-ended questions. For each of the three year groups, these themes were categorised as 'recurring positives' and 'recurring negatives'. Examples of the former include the school musical, subject sampling and specific modules, and the positive reports on TY from older students. Examples of recurring negative themes include the compulsory nature of the year, having to fill in a journal, and reservations about being bored or inactive.

Appendix F: Self-Generated Identification Codes (SGICs)

Answers to the survey were to be provided anonymously, but with the imperative that an individual student's answers in each wave could be matched to the other waves. Therefore, it was necessary to create a unique, reliable identifier for each student. Rather than assigning an ID number to students in the first instance (on the dual grounds that very few students would remember their designated number between waves, and that schools would not consistently be able to match an individual student to their ID number in subsequent waves) it was decided that students should create their own ID code.

Self-generated identification codes (SGICs) of this nature were first suggested in a medical context as a means of identifying patient records over time and across different hospitals (Hogben, Johnstone & Cross, 1948), and were later developed for use in surveys of adolescent alcohol and drug usage in the 1970s by Carifio and Biron (1982). They have previously been used successfully in longitudinal research involving adolescents and young people, particularly when anonymity for participants is a concern or when sensitive issues (e.g., sexual practices or drug use) are involved (e.g., DiIorio, Soet, Van Marter, Woodring & Dudley, 2000; Faden et al., 2004; Grube, Morgan & Kearney, 1989). The promise of anonymity conferred by using SGICs, rather than names or other obvious personal identifiers, also helps to ensure that the resulting data is of high quality and is less susceptible to under- or over-reporting of socially-desirable responses (Durant, Carey & Schroder, 2002). The use of SGICs thus solves one of the major problems of research involving adolescents or topics of a sensitive nature by providing reassurances as to the genuine anonymity of participants' responses.

The SGIC structure followed a consistent pattern, which was described on the front cover of the questionnaire booklets for participants to follow. Students were asked to fill in their complete date of birth (day, month, and year), the number of older brothers that they have (a self-generated numeric response), the first letter of their first name (e.g., A for Anne), and their gender (M for male, or F for female).

These variables were chosen for three reasons. First, they tend to exhibit high variance between respondents (with the exception of gender), thereby reducing the chances of duplicate IDs (cf. McGloin, Holcomb & Main, 1996). Second, they are highly stable – they should remain the same from year to year (although it is recognised that participants do not always

complete even highly stable details in a consistent manner; cf. Schnell, Bachteler & Reiher, 2010). Third, the inclusion of date of birth and gender in the ID gives 'value for money' in that it provides useful demographic information while reducing the response load on participants by removing two questions from the main questionnaire.

When combined with the two-digit ID number of the school and the particular grade level of the student – both of which are common to sets of participating students, and so were filled in by the researcher upon receipt of the completed booklets – the full ID code takes the format '4132901950AF'. In this fictional example, we see that the student attends School 41 (41), is a Third Year student (3), was born on January 29th, 1995 (290195), has no older brothers (0), has a first name beginning with the letter 'A' (A), and is female (F).

The ID code thus generated is reliable (with all details remaining stable from year to year, except for the grade level which is added and monitored as an extra check by the researcher), easy to manage (students don't need to remember anything – they simply fill in their own details as instructed on the cover page), and close to unique (as the chances of two students generating the same combination of details are very low). For example, in the first wave of this study, 3992 students (99.3%) produced SGICs that were, in fact, unique. Only eleven pairs of students (0.7%) produced matching SGICs, in one case because part of the SGIC (the date of birth) was missing.

The matching process was accomplished using syntax written for SPSS (version 20). A complementary, parallel round of matching was also performed using Microsoft Access in order to verify the results of the SPSS match and to check for unforeseen problems. A small number of discrepancies were noted and resolved. For example, four students who completed a Fifth Year questionnaire in 2011 were matched to another Fifth Year questionnaire in 2012, and to a Sixth Year questionnaire in 2013. A further three students were in Third Year in 2011, and Fifth Year in both 2012 and 2013. For each of these students, details such as their age, parental education, language spoken at home, whether they had previously taken part in Transition Year, and so on, were compared. In each case, the data were very consistent across waves. In addition, it was confirmed that the SGICs in question did not duplicate any other IDs and were fully complete (i.e., not missing any components). Therefore, the possibility that another student had been incorrectly left 'unmatched' was ruled out, and the matches were retained with the most likely explanation being that these seven students had repeated Fifth Year.

This Appendix describes the results of preliminary analyses conducted to determine the possibility of problems with the data.

G.1 Assumption of normality

Each of the psychosocial outcome measures were first examined for skewness and kurtosis. This was done in order to assess the assumption of normality. *Normality*, here, refers to the sampling distribution of student responses relative to the normal (Gaussian) distribution, often known as the bell curve. Under a normal distribution, 68% of observations lie within one standard deviation of the mean, 95% of observations lie within two standard deviations, and 99.7% of observations lie within three standard deviations. This property underpins many inferential statistical tests, including t-tests and analyses of variance (ANOVAs). In the absence of a normal distribution, the use of ANOVA-based statistics risks leading the researcher to erroneous or invalid conclusions (Ghasemi & Zahediasl, 2012).

Two specific indicators of the normality of a distribution are its skewness and kurtosis. *Skewness* and *kurtosis* denote, respectively, the symmetry and the 'peakedness' of a distribution (Fidell & Tabachnik, 2003). Skewness refers to responses being bunched at the left or right sides of the distribution (versus a symmetrical appearance). Kurtosis refers to the distribution being 'peaked' in the middle and thin at the tails (a platykurtic distribution) or 'flat' in the middle and thick at the tails (a leptokurtic distribution), versus a normal, mesokurtic distribution.

Because of the central limit theorem,⁴⁷ best practice when judging the extent of divergence from normality in large sample sizes is to rely primarily on visual representations of the data rather than formal statistical measures of skewness and kurtosis, which are only suitable with small samples. To the extent that statistical measures of divergence remain useful as a guideline with large samples, Kim (2013) suggests that anything above an absolute value of ± 2 for skewness, and ± 7 for kurtosis, be considered problematic. Large samples, in this

⁴⁷ The tendency for the mean of a sufficiently large number of independent observations of a random variable to approximate to the normal distribution of sample means, regardless of the shape of the population distribution. As sample size increases, the sampling distribution of the mean tends to approximate more and more closely to normality. In effect, this implies that for large numbers of observations, the sampling distribution of the mean *must* be normal.

context, are considered to be those of about 200 (Field, 2007) to 300 people (Fidell & Tabachnik, 2003; Kim, 2013).

However, with very large samples, consensus is that normality can be assumed to apply for practical purposes regardless of the shape of the observed data (Altman & Bland, 1995; Field, 2013; Lumley, Diehr, Emerson & Chen, 2002). The number of observations required to meet this application of the central limit theorem has been suggested as ranging from as low as 30 or 40 (Field, 2013; Ghasemi & Zahediasl, 2012) to 150 (Watt & van den Berg, 1995) up to, conservatively, "hundreds of observations" (Altman & Bland, 1995; cf. Lumley et al, 2002). Based on these recommendations, the very large number of observations in the current study (>9000) suggests that the data gathered here should be treated as normally distributed for any statistical analyses.

Nonetheless, measures of skewness and kurtosis were calculated here for each of the psychosocial measures. Visual inspection of histograms revealed a tendency towards some negative skew – i.e., more participants at the higher end of the distribution than at the lower end – for four variables (perceived competence, perceptions of teacher support (RAPS), self satisfaction, and school legacy), and slight positive skew for one (the self-reliance subscale). No variables exhibited generally platykurtic or leptokurtic distributions, although there was a noticeable spike at the midpoint of the subjective age scale.

For skewness, statistical measures of divergence ranged (in absolute terms, regardless of positive or negative direction) from a minimum of -.09 (work orientation) to a maximum of -1.07 (perceived competence). The negative sign indicates some skew towards higher scores on the respective scale. For kurtosis, absolute scores ranged from a low of .11 for self-reliance, to a high of 1.07 for subjective age. Here, positive values represent 'peaked' distributions, while negative signs represent flatter distributions. For both measures of normality, all scores were well within Kim's (2013) guideline values for acceptable skewness and kurtosis.

These histograms and measures of skewness and kurtosis were constructed separately for each of the three waves, as well as the overall pooled data, in order to check for any unforeseen irregularities. No issues of concern were noted. Given the absence of any serious problems flagged by these tests, the very large number of observations, and the applications of the central limit theorem, it seems safe to treat these data as meeting the assumptions of normality for inferential testing (Altman & Bland, 1995; Field, 2013).

G.2 Outliers

Following recommended procedures (Wilkinson & the Task Force on Statistical Inference, 1999), the student responses were screened for outliers before analysis. Both visual and statistical methods of screening were used (Field, 2013; Tabachnik & Fidell, 2013).

G.2.1 Visual screening

Boxplots were constructed to examine the range of responses, divided into approximate quartiles, and the presence of extreme cases. Extreme cases are defined as those with values more than three times the interquartile range beyond the upper or lower quartile limits.

Only two variables appeared to have extreme cases present in the boxplot. These variables were the amount of time spent on homework, which had a number of extremely high values, and the subjective age scale, which had a number of extremely low values. These were examined further using the statistical methods described in the next section. All other variables exhibited either a small number of outliers lying closer to the approximate upper or lower limits, or no outliers at all.

G.2.2 Statistical screening

All psychosocial outcome measures were standardised to produce z-scores with a mean of 0 and a standard deviation of 1. In a normal standard distribution, roughly 95% of cases are expected to have a z-score between 0 and ± 1.96 , and about 99% of cases are expected to show z-scores between 0 and ± 2.58 (Field, 2013). Only a very small percentage of cases are expected to have z-scores above ± 3.29 .

For psychosocial outcomes, all participants were seen to be within the normal range, except for 21 individual cases (0.2% of 9058 observations) who reported very low values for self-reliance. As some extreme outliers such as these are to be expected in very large samples (Tabachnik & Fidell, 2013), no adjustments were made.

Among other variables, six participants were found to report extremely high ages (from 20 years old in Fifth Year to 23 years old in Sixth Year). Each of these participated in only one wave of the survey. The ages for these six participants were recoded to the highest values that did not categorise them as extreme cases (i.e., the equivalent of a z-score of 3.29). This process is known as *winsorizing* or *truncating*. Truncating is commonly used with unrealistic values of outliers, such as these, in order to reduce the influence of these cases on subsequent models, and thereby ensure that the data are more likely to be representative of the population as a whole (Field, 2013; Osborne & Overbay, 2004). Finally, 41 extremely high values for time spent on homework were reported. These ranged from 31 hours per week to 51 hours per

week. As with extreme reported ages, these values were all truncated to 31 hours (z-score of 3.29) for subsequent analysis.

Appendix H: Tests for attrition bias

This appendix presents full tabulated versions of the analyses that are described in text in Chapter 3 in order to examine the possibility of bias due to participant attrition in the longitudinal data. Two tests for attrition bias were carried out (Miller and Wright, 1995), as described below. Each test was carried out in two parallel steps.

Firstly, students who took part in Transition Year in 2012 ("TY participants") were examined. The TY students for whom complete three-wave longitudinal information were available (the 'longitudinal sample') were compared to those who took part in only one or two waves (the 'attrition sample') on a range of background measures and on their baseline (Wave 1/Third Year) status on each of the main outcome variables. Secondly, students who did not take part in Transition Year ('non-participants') were assessed in similar fashion, by comparing the nonparticipant longitudinal and attrition samples.

Students who took part in two or three waves of the study could be clearly categorised as TY participants or non-participants for the purposes of examining differences between the two groups. In contrast, no subsequent information is available on students who took part only in the first wave while in Third Year. However, as the purpose of the bias analysis is to determine whether the longitudinal sample remains representative of the original Third Year students, the idea of dropping students who took part only in Third Year from the analysis was considered counter-productive. Therefore, these students were classified as 'probable' TY participants or non-participants on the basis of their declared intentions⁴⁸ regarding participation in TY and were included in that group for bias analysis.

H.1 Sample characteristics

First, the possibility of bias affecting the characteristics of the sample was assessed. Differences in categorical variables, such as gender, were assessed for statistical significance by means of the chi-square test, which compares the distribution of frequencies of each category (e.g., male, female) over the two groups to be assessed (the longitudinal sample and attrition sample). Differences in continuous variables, such as age, were assessed by using t-tests to compare the means and standard deviations of the two groups on each measure (Miller & Wright, 1995).

⁴⁸ The question was: Do you think you will take part in Transition Year next year?

For both types of test, a statistically-significant p-value suggests that the observed differences between the two groups on that variable are greater than would be expected by chance if no true difference between the groups existed. Because the conventional threshold for judging statistical significance (p < 0.05) assumes that one test in twenty (i.e., 5% of tests) will produce a false positive result, the Holm-Bonferroni correction was applied to take account of the familywise error rate of these tests (the multiple comparisons carried out). The classic Bonferroni correction is calculated simply by dividing the conventional p-value (0.05) by the number of tests (in this case, 21 on each group) to produce a more stringent threshold for statistical significance (.002) that is less susceptible to false positives. Holm's 'sequential' variation on this procedure (Holm, 1979) requires the variable with the *lowest* p-value to meet this threshold (.05/number of tests). The variable with the *second-lowest* p-value must then meet a slightly less conservative threshold (.05/(number of tests-1)), while the variable with the *third-lowest* p-value must meet (.05/(number of tests-2)), and so on. In this way the Holm-Bonferroni correction retains greater power to detect true effects, while still protecting against an inflated familywise error rate (Abdi, 2010).

For students who did not take part in TY (Table H.1), no statistically-significant differences in baseline demographic, attitudinal, or psychosocial characteristics were found between the longitudinal and attrition samples. Effect sizes were calculated, with the largest found for the distribution of students' educational aspirations (Cramer's V = .18), such that students who took part in one or two waves were somewhat more likely than students who took part in all three waves to endorse lower aspirations. This is considered a small effect (Cohen, 1992; Ferguson, 2009) and not indicative of any serious bias.

For TY participants (Table H.2), no statistically-significant differences were found between the longitudinal and attrition samples. The largest effect size among this group was for the RAPS experience of teacher support scale (Cohen's d = .16). This is interpreted as a small effect (Cohen, 1992; Ferguson, 2009) and not problematic.

In sum, the first test of sample characteristics found no substantive evidence of attrition bias, either among Transition Year participants and non-participants, or between the two groups.

	(potential lo	ongitudinal participan	ts)		
		Non-participants	Non-	X ²	р
		– longitudinal	participants –	or	
		sample	attrition sample	t-statistic	
		(N = 96)	(N = 264)		
Gender	Male	46	132	.252	.615
	Female	48	122		
Age	Mean (SD)	15.5 (.40)	15.6 (.56)	490	.624
Educational aspirations	Junior Cert.	0	8	11.720	.039
	Leaving Cert.	21	64		
	PLC /	6	16		
	apprenticeship				
	Cert. / diploma	10	36		
	Degree	53	106		
	Don't know	2	23		
Mother's education	Did not complete	0	2	3.576	.734
	primary				
	Primary	5	15		
	Lower secondary	15	47		
	Upper secondary	29	59		
	Cert/diploma	14	29		
	Degree/postgrad	15	42		
	Don't know	15	49		
Father's education	Did not complete	3	10	3.311	.769
	primary	-			
	Primary	6	23		
	Lower secondary	20	119		
	Upper secondary	26	140		
	Cert/diploma	7	100		
	Degree/postgrad	12	190		
	Don't know	18	73		
Language spoken at home	English	84	209	.683	.711
0.0.0.0	Irish	1	3		
	Another language	9	31		
Engagement in learning	Mean (SD)	3.44 (.76)	3.32 (.76)	1.275	.203
Experience of teacher	Mean (SD)	3.67 (.96)	3.56 (.98)	.971	.332
support (RAPS)	(-)	()	()	_	
Perceived competence	Mean (SD)	4.21 (.74)	4.13 (.92)	.723	.470
Autonomous motivation	Mean (SD)	2.78 (.84)	2.61 (.85)	1.681	.094
School belonging	Mean (SD)	3.53 (.69)	3.47 (.68)	.716	.475
Perceptions of teacher	Mean (SD)	3.49 (.92)	3.34 (1.08)	1.217	.224
support (PISA)		0.10 (10 -)	0.0 . (2.00)		
Social self-efficacy	Mean (SD)	4.94 (.95)	2.04 (.97)	880	.379
Subjective age	Mean (SD)	4.44 (.92)	4.42 (.98)	.211	.833
Self-reliance	Mean (SD)	3.54 (.62)	3.48 (.73)	.692	.490
Work orientation	Mean (SD)	3.20 (.89)	3.01 (.93)	1.713	.088
Personal responsibility	Mean (SD)	3.38 (.63)	2.28 (.71)	1.220	.223
Global life satisfaction	Mean (SD)	4.27 (.98)	4.13 (1.06)	1.128	.260
Self satisfaction	Mean (SD)	4.54 (.93)	4.41 (.98)	1.164	.245
School satisfaction	Mean (SD)	3.77 (1.22)	3.52 (1.22)	1.709	.088
School legacy	Mean (SD)	3.70 (.83)	3.61 (1.00)	.921	.358

Table H.1. Characteristics of TY non-participants who were in Third Year in Wave 1 (potential longitudinal participants)

Critical value for statistical significance (corrected using Holm-Bonferroni procedure) starts at $p \le 0.002$.

To facilitate simplified presentation, Ns shown are the overall number of students in each group. Ns vary slightly across variables due to missing data.

	(potentia	l longitudinal participa	ants)		
		TY participants –	TY participants	X ² or	р
		longitudinal	 attrition 	t-statistic	
		sample	sample		
		(N = 525)	(N = 678)		
Gender	Male	298	351	3.036	.081
	Female	225	325		
Age	Mean (SD)	15.4 (.38)	15.4 (.47)	-2.090	.037
Educational aspirations	Junior Cert.	8	12	6.571	.255
-	Leaving Cert.	57	81		
	PLC /	8	23		
	apprenticeship				
	Cert. / diploma	89	94		
	Degree	323	410		
	Don't know	34	49		
Mother's education	Did not complete	0	1	6.448	.375
	primary	0	-	0.110	
	Primary	13	10		
	Lower secondary	63	76		
	Upper secondary	142	180		
	Cert/diploma	142	100		
	Degree/postgrad	143	206		
	Degree/postgrau	46	206 74		
Father's advection				2 017	C 00
Father's education	Did not complete	3	10	3.917	.688
	primary				
	Primary	14	23		
	Lower secondary	98	119		
	Upper secondary	102	140		
	Cert/diploma	85	100		
	Degree/postgrad	143	190		
	Don't know	62	73		
Language spoken at	English	494	634	3.192	.203
home	Irish	4	2		
	Another language	12	25		
Engagement in learning	Mean (SD)	3.65 (.63)	3.64 (.67)	.332	.740
Experience of teacher	Mean (SD)	3.94 (.75)	3.82 (.79)	2.619	.009
support (RAPS)					
Perceived competence	Mean (SD)	4.39 (.67)	4.29 (.75)	2.459	.014
Autonomous motivation	Mean (SD)	2.67 (.86)	2.74 (.88)	-1.322	.187
School belonging	Mean (SD)	3.70 (.63)	3.72 (.62)	396	.692
Perceptions of teacher	Mean (SD)	3.69 (.85)	3.60 (.91)	1.766	.078
support (PISA)		ζ, γ	, , ,		
Social self-efficacy	Mean (SD)	5.12 (.93)	5.09 (.89)	.386	.700
Subjective age	Mean (SD)	4.22 (.84)	4.28 (.83)	-1.387	.166
Self-reliance	Mean (SD)	3.56 (.62)	3.55 (.63)	.692	.490
Work orientation	Mean (SD)	3.27 (.84)	3.25 (.86)	1.713	.088
Personal responsibility	Mean (SD)	3.44 (.61)	3.42 (.62)	1.22	.223
Global life satisfaction	Mean (SD)	4.41 (.92)	4.34 (.94)	.453	.650
Self satisfaction	Mean (SD)	4.70 (.79)	4.66 (.84)	.455	.421
School satisfaction	Mean (SD)	3.99 (1.01)	4.02 (1.04)	.804 510	.421
				1	
School legacy	Mean (SD)	4.03 (.76)	3.97 (.77)	1.285	.199

Table H.2. Characteristics of TY non-participants who were in Third Year in Wave 1 (potential longitudinal participants)

Critical value for statistical significance (corrected using Holm-Bonferroni procedure) starts at $p \le 0.002$.

To facilitate simplified presentation, Ns shown are the overall number of students in each group. Ns vary slightly across variables due to missing data.

H.2 Relationships between variables

The second test of attrition bias sought to determine whether the relationships between the outcome variables (their covariance) were similar for the longitudinal and attrition samples. Any indication that the variables showed different relationships with each other in different samples would pose a threat to the internal validity of the study by suggesting that the longitudinal sample may no longer be fully representative of the broader student population. This test was carried out by comparing the correlation matrices of the longitudinal sample and the attrition sample for the psychosocial outcome measures (Miller & Wright, 1995). As with the previous test of sample characteristics, this test was carried out separately for TY participants and non-participants.

First, correlation coefficients were calculated for every pairing of psychosocial outcome variable (105 pairs in total). Second, each pair – for example, social self-efficacy correlated with subjective age – was used to calculate Fisher's Z-test,⁴⁹ in order to ascertain the magnitude of the difference between the two correlations. Third, statistical significance was determined by comparing Fisher's Z for each pair of correlations to a table of critical p-values.⁵⁰ As above, the Holm-Bonferroni correction for multiple comparisons was applied to protect against an inflated Type I (false positive; incorrect rejection of the null hypothesis) error rate. Any instance where Fisher's Z-test exceeded the critical value ($Z \ge 3.49$) for a pair of correlations would provide evidence that the relationship between those two variables among the longitudinal sample was different from the relationship between those two variables among the attrition sample, possibly indicating bias due to attrition.

The results of the analysis are shown in Table H.3 and Table H.4. No value of Fisher's Z approached 3.49, either among Transition Year participants or non-participants. The results thus show that the covariance of variables is reasonably similar between the longitudinal sample and the attrition sample. This is interpreted as providing no evidence of bias due to attrition between the samples.

Taken together, the findings of both types of bias analysis – bias relating to participants' characteristics and bias relating to the covariance of outcomes – suggest that the three-wave longitudinal sample has not been negatively affected by attrition bias. It can be considered as being representative of the original sample.

⁴⁹ Fisher's Z was calculated using two pieces of free software – Kristopher Preacher's *Calculation for the test of the difference between two independent correlation coefficients* (available from <u>http://www.quantpsy.org/corrtest/corrtest.htm</u>), and Calvin Garbin's FZT package (available from <u>http://psych.unl.edu/psycrs/statpage/comp.html</u>). Both packages produced the same results.

⁵⁰ For example: <u>http://faculty.washington.edu/heagerty/Books/Biostatistics/TABLES/t-Tables/</u>.

	H.3. Test of attrition bias – relationships between	•	• •	
		Non-	Non-	Fisher's
		participants –	participants –	Z
		study sample	attrition sample	
		(N = 95)	(N = 255)	
Engagement in	Experience of teacher support (RAPS),	.447	.381	.654
learning (RAPS),	Wave 1			
Wave 1	Perceived competence (RAPS) , Wave 1	.548	.553	.059
	Autonomous motivation (RAPS), Wave 1	.667	.538	1.675
	School belonging , Wave 1	.392	.271	1.118
	Perceptions of teacher support (PISA),	.368	.450	.809
	Wave 1			
	Social self-efficacy, Wave 1	.248	.137	.947
	Subjective age, Wave 1	.104	.115	.091
	PMI self-reliance, Wave 1	399	223	1.606
	PMI work orientation, Wave 1	635	559	.972
	PMI personal responsibility, Wave 1	576	447	1.441
	Global life satisfaction, Wave 1	.507	.210	2.836
	Self satisfaction, Wave 1	.383	.298	.790
	School satisfaction, Wave 1	.567	.577	.122
	School legacy, Wave 1	.458	.330	1.247
Experience of	Perceived competence (RAPS) , Wave 1	.396	.335	.578
teacher support	Autonomous motivation (RAPS), Wave 1	.430	.233	1.827
(RAPS), Wave 1	School belonging , Wave 1	.429	.380	.481
	Perceptions of teacher support (PISA),	.741	.765	.455
	Wave 1			
	Social self-efficacy, Wave 1	.218	.243	.217
	Subjective age, Wave 1	021	.062	.337
	PMI self-reliance, Wave 1	121	096	.208
	PMI work orientation, Wave 1	218	159	.502
	PMI personal responsibility, Wave 1	170	147	.194
	Global life satisfaction, Wave 1	.351	.386	.594
	Self satisfaction, Wave 1	.216	.315	.875
	School satisfaction, Wave 1	.431	.542	1.197
	School legacy, Wave 1	.397	.439	.418
Perceived	Autonomous motivation (RAPS) , Wave 1	.472	.304	1.631
competence	School belonging , Wave 1	.297	.268	1.197
(RAPS) , Wave 1	Perceptions of teacher support (PISA),	.283	.390	.992
(<i>)</i> ,,	Wave 1			
	Social self-efficacy, Wave 1	.249	.240	.079
	Subjective age, Wave 1	.100	.021	.651
	PMI self-reliance, Wave 1	348	103	2.133
	PMI work orientation, Wave 1	447	264	1.728
	PMI personal responsibility, Wave 1	443	210	2.157
	Global life satisfaction, Wave 1	.361	.235	1.138
	Self satisfaction, Wave 1	.324	.321	.027
	School satisfaction, Wave 1	.499	.461	.405
	School legacy, Wave 1	.276	.245	.273
Autonomous	School belonging , Wave 1	.359	.137	1.953
motivation	Perceptions of teacher support (PISA),	.522	.295	2.258
(RAPS) , Wave 1	Wave 1	.522	.255	2.200
(Social self-efficacy, Wave 1	.116	.036	.661
	Subjective age, Wave 1	.162	.089	.609
	PMI self-reliance, Wave 1	259	105	1.311
	PMI work orientation, Wave 1	541	396	1.511
	PMI personal responsibility, Wave 1	466	285	1.739
	Global life satisfaction, Wave 1	.420	.130	2.602
	Giobal IIIE Satistaction, Wave 1	.420	.120	2.002

Table H.3. Test of attrition bias – relationships between variables,	for TY non-participants.
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	Self satisfaction, Wave 1	.236	.190	.396
	School satisfaction, Wave 1	.639	.407	2.664
	School legacy, Wave 1	.472	.150	2.968
School belonging	Perceptions of teacher support (PISA),	.370	.359	.104
, Wave 1	Wave 1	600	0.47	
	Social self-efficacy, Wave 1	.600	.317	2.995
	Subjective age, Wave 1	.071	.016	.452
	PMI self-reliance, Wave 1	354	193	1.433
	PMI work orientation, Wave 1	300	245	.488
	PMI personal responsibility, Wave 1	373	253	1.094
	Global life satisfaction, Wave 1	.528	.513	.169
	Self satisfaction, Wave 1	.590	.467	1.40
	School satisfaction, Wave 1	.523	.455	.735
	School legacy, Wave 1	.420	.428	.080
Perceptions of	Social self-efficacy, Wave 1	.139	.138	.008
teacher support	Subjective age, Wave 1	.181	.064	.976
(PISA) , Wave 1	PMI self-reliance, Wave 1	133	125	.067
	PMI work orientation, Wave 1	223	251	.244
	PMI personal responsibility, Wave 1	186	217	.265
	Global life satisfaction, Wave 1	.338	.385	.444
	Self satisfaction, Wave 1	.193	.350	1.39
	School satisfaction, Wave 1	.523	.620	1.18
	School legacy, Wave 1	.420	.489	.715
Social self-	Subjective age, Wave 1	.176	.144	.270
efficacy, Wave 1	PMI self-reliance, Wave 1	305	191	.999
	PMI work orientation, Wave 1	129	115	.117
	PMI personal responsibility, Wave 1	145	178	.278
	Global life satisfaction, Wave 1	.255	.313	.518
	Self satisfaction, Wave 1	.478	.428	.517
	School satisfaction, Wave 1	.395	.188	1.86
	School legacy, Wave 1	.456	.174	2.59
Subjective age,	PMI self-reliance, Wave 1	133	008	1.03
Wave 1	PMI work orientation, Wave 1	023	077	.445
	PMI personal responsibility, Wave 1	021	050	.238
	Global life satisfaction, Wave 1	.007	020	.411
	Self satisfaction, Wave 1	.237	120	.993
	School satisfaction, Wave 1	.267	026	2.03
	School legacy, Wave 1	.155	119	.301
PMI self-reliance,	PMI work orientation, Wave 1	.545	.503	.476
Wave 1	PMI personal responsibility, Wave 1	.863	.874	.368
	Global life satisfaction, Wave 1	319	245	.578
	Self satisfaction, Wave 1	416	244	1.59
	School satisfaction, Wave 1	354	184	1.51
	School legacy, Wave 1	201	159	.356
PMI work	PMI personal responsibility, Wave 1	.884	.860	.825
orientation,	Global life satisfaction, Wave 1	385	196	1.70
	-			1
Wave 1	Self satisfaction, Wave 1 School satisfaction, Wave 1	339 463	239 388	.897
		463 365	388 220	1
	School legacy, Wave 1			1.30
PMI personal	Global life satisfaction, Wave 1	404	256	1.36
responsibility,	Self satisfaction, Wave 1	429	279	1.41
Wave 1	School satisfaction, Wave 1	446	330	1.12
	School legacy, Wave 1	299	218	.713
Global life	Self satisfaction, Wave 1	.599	.557	.518
satisfaction,	School satisfaction, Wave 1	.480	.389	.922
Wave 1	School legacy, Wave 1	.348	.307	.377
	School satisfaction, Wave 1	.435	.504	.727

Self satisfaction, Wave 1	School legacy, Wave 1	.383	.289	.871
School satisfaction, Wave 1	School legacy, Wave 1	.382	.523	1.462

Critical value for statistical significance (corrected using the Holm-Bonferroni procedure) is $p \le 0.0005$. In order to reach this threshold, the value for the variable with the highest Fisher's Z should be 3.49 or greater.

To facilitate simplified presentation, Ns shown are the overall number of students in each group. Ns vary slightly across variables due to missing data.

		TY participants – study sample	TY participants – attrition	Fisher' Z
		(N = 515)	sample (N = 670)	
Engagement in learning (RAPS) ,	Experience of teacher support (RAPS), Wave 1	.387	.395	.161
Wave 1	Perceived competence (RAPS) , Wave 1	.473	.442	.667
	Autonomous motivation (RAPS) , Wave 1	.600	.555	1.150
	School belonging , Wave 1	.385	.304	1.566
	Perceptions of teacher support (PISA) , Wave 1	.381	.339	.821
	Social self-efficacy, Wave 1	.163	.053	1.896
	Subjective age, Wave 1	.014	054	.682
	PMI self-reliance, Wave 1	279	247	.585
	PMI work orientation, Wave 1	603	622	.518
	PMI personal responsibility, Wave 1	520	513	.162
	Global life satisfaction, Wave 1	.308	.298	.187
	Self satisfaction, Wave 1	.326	.242	1.556
	School satisfaction, Wave 1	.532	.562	.729
	School legacy, Wave 1	.417	.365	1.045
Experience of	Perceived competence (RAPS) , Wave 1	.377	.343	.665
teacher support	Autonomous motivation (RAPS) , Wave 1	.331	.290	.005
(RAPS) , Wave 1	School belonging , Wave 1	.331	.331	0
(RAPS), Wave I	Perceptions of teacher support (PISA) , Wave 1	.701	.763	2.282
	Social self-efficacy, Wave 1	.163	.099	1.109
	Subjective age, Wave 1	.028	003	.426
				1
	PMI self-reliance, Wave 1	273	107	2.939
	PMI work orientation, Wave 1	299	236	1.155
	PMI personal responsibility, Wave 1	336	203	2.446
	Global life satisfaction, Wave 1	.285	.346	1.154
	Self satisfaction, Wave 1	.301	.252	.903
	School satisfaction, Wave 1	.450	.428	.464
	School legacy, Wave 1	.326	.404	1.533
Perceived	Autonomous motivation (RAPS), Wave 1	.297	.320	.433
competence	School belonging , Wave 1	.340	.257	1.552
(RAPS) , Wave 1	Perceptions of teacher support (PISA) , Wave 1	.329	.250	1.469
	Social self-efficacy, Wave 1	.235	.172	1.119
	Subjective age, Wave 1	017	027	.170
	PMI self-reliance, Wave 1	218	197	.374
	PMI work orientation, Wave 1	416	343	1.453
	PMI personal responsibility, Wave 1	374	320	1.045
	Global life satisfaction, Wave 1	.326	.272	1.010
	Self satisfaction, Wave 1	.419	.314	2.068
	School satisfaction, Wave 1	.413	.376	.746
	School legacy, Wave 1	.338	.289	.925
Autonomous	School belonging , Wave 1	.310	.271	.725
motivation (RAPS) , Wave 1	Perceptions of teacher support (PISA) , Wave 1	.314	.267	.874
	Social self-efficacy, Wave 1	.102	.112	.172
	Subjective age, Wave 1	.040	.027	.222
	PMI self-reliance, Wave 1	131	233	1.797
	PMI work orientation, Wave 1	454	491	1.257
			.+	1 1.207
	PMI personal responsibility, Wave 1	345	425	1.600

Table H.4. Test of attrition bias – relationships between variables, for TY participants.

	Self satisfaction, Wave 1	.290	.301	.205
	School satisfaction, Wave 1	.537	.499	.884
	School legacy, Wave 1	.343	.286	1.077
School belonging	Perceptions of teacher support (PISA),	.360	.328	.618
, Wave 1	Wave 1			
	Social self-efficacy, Wave 1	.524	.474	1.134
	Subjective age, Wave 1	.108	.120	.207
	PMI self-reliance, Wave 1	353	293	1.141
	PMI work orientation, Wave 1	351	291	1.139
	PMI personal responsibility, Wave 1	415	343	1.432
	Global life satisfaction, Wave 1	.550	.570	.496
	Self satisfaction, Wave 1	.608	.582	.685
	School satisfaction, Wave 1	.417	.442	.522
	School legacy, Wave 1	.365	.392	.536
Perceptions of	Social self-efficacy, Wave 1	.130	.084	.792
teacher support	Subjective age, Wave 1	.047	012	.596
(PISA) , Wave 1	PMI self-reliance, Wave 1	260	099	2.839
	PMI work orientation, Wave 1	265	207	1.046
	PMI personal responsibility, Wave 1	309	180	2.339
	Global life satisfaction, Wave 1	.301	.326	.472
	Self satisfaction, Wave 1	.298	.236	1.137
	School satisfaction, Wave 1	.451	.418	.692
	School legacy, Wave 1	.352	.406	1.074
Social self-	Subjective age, Wave 1	.231	.276	.819
efficacy, Wave 1	PMI self-reliance, Wave 1	308	284	.448
	PMI work orientation, Wave 1	176	138	.663
	PMI personal responsibility, Wave 1	284	248	.659
	Global life satisfaction, Wave 1	.388	.292	1.850
	Self satisfaction, Wave 1	.487	.447	.871
	School satisfaction, Wave 1	.226	.181	.799
	School legacy, Wave 1	.220	.190	.533
Subjective age,	PMI self-reliance, Wave 1	126	163	.643
Wave 1	PMI work orientation, Wave 1	029	.005	.409
	PMI personal responsibility, Wave 1	091	094	.051
	Global life satisfaction, Wave 1	.069	.024	.768
	Self satisfaction, Wave 1	.174	.137	.645
	School satisfaction, Wave 1	024	.009	.255
	School legacy, Wave 1	010	024	.238
PMI self-reliance,	PMI work orientation, Wave 1	.447	.454	.149
Wave 1	PMI personal responsibility, Wave 1	.847	.850	.182
	Global life satisfaction, Wave 1	297	274	.426
	Self satisfaction, Wave 1	318	303	.283
	School satisfaction, Wave 1	146	228	1.447
	School legacy, Wave 1	146	087	1.018
PMI work	PMI personal responsibility, Wave 1	.853	.856	.189
orientation,	Global life satisfaction, Wave 1	256	237	.344
Wave 1	Self satisfaction, Wave 1	346	247	1.850
	School satisfaction, Wave 1	390	488	2.070
	School legacy, Wave 1	290	231	1.078
PMI personal	Global life satisfaction, Wave 1	326	300	.491
responsibility,	Self satisfaction, Wave 1	391	323	1.327
Wave 1	School satisfaction, Wave 1	316	421	2.071
	School legacy, Wave 1	256	189	1.200
Global life	Self satisfaction, Wave 1	.577	.627	1.336
satisfaction,	School satisfaction, Wave 1	.313	.370	1.099
Wave 1	School legacy, Wave 1	.291	.300	.168
	School satisfaction, Wave 1	.432	.369	1.278

Self satisfaction, Wave 1	School legacy, Wave 1	.304	.308	.075
School satisfaction, Wave 1	School legacy, Wave 1	.514	.490	.546

Critical value for statistical significance (corrected using the Holm-Bonferroni procedure) is $p \le 0.0005$. In order to reach this threshold, the value for the variable with the highest Fisher's Z should be 3.49 or greater.

To facilitate simplified presentation, Ns shown are the overall number of students in each group. Ns vary slightly across variables due to missing data.

Appendix I: Additional latent growth curve models

This appendix presents the complete latent growth curve models for the outcome measures that were reported in summarised form only in Chapter 5. The information given here should be interpreted in the same way as for Tables 5.5 to 5.8.

		Model A Model B			
		b (SE)	b (SE)	β (SE)	
	Intercept	3.58 (.06)***	3.49 (.13)***	4.71 (.26)***	
	TY participant (Ref: non-participant)	-	.22 (.07)**	.29 (.10)**	
	Male (<i>Ref: female</i>)	-	12 (.08)	16 (.10)	
	Age (centered)	-	.19 (.06)**	.11 (.04)**	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	04 (.11)	05 (.14)	
	Third level	-	14 (.07)*	19 (.09)*	
Initial	Home language (Ref: English/Irish)				
status	Another language	-	.02 (.03)	.03 (.04)	
(baseline)	Weekly hours homework (centered)	-	.02 (.01)***	.19 (.04)***	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	16 (.12)	22 (.16)	
	Degree	-	.17 (.10)	.23 (.14)	
	Don't know	-	.20 (.14)	.28 (.18)	
	Know what job would like (Ref: Yes)				
	Maybe	-	.00 (.06)	.00 (.08)	
	No	-	11 (.08)	15 (.11)	
	Intercept	.33 (.27)	.41 (.28)	2.66 (.92)**	
	Initial status	07(.07)	10 (.08)	47 (.12)***	
	TY participant (Ref: non-participant)	-	.02 (.03)	.15 (.21)	
	Male (<i>Ref: female</i>)	-	.04 (.05)	.25 (.38)	
	Age (centered)	-	.02 (.03)	.05 (.07)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	07 (.06)	44 (.45)	
CI	Third level	-	.02 (.03)	.14 (.19)	
Slope	Home language (Ref: English/Irish)				
(rate of	Another language	-	02 (.01)	10 (.11)	
change)	Weekly hours homework (centered)	-	00 (.00)	04 (.13)	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	01 (.04)	05 (.27)	
	Degree	-	01 (.06)	12 (.37)	
	Don't know	-	.01 (.06)	.09 (.39)	
	Know what job would like (Ref: Yes)				
	Maybe	-	.02 (.04)	.10 (.27)	
	No	-	.05 (.03)	.34 (.38)	
(Residual)	Initial status	.52 (.05)***	.48	(.05)***	
Variance	Slope	.01 (.03)	<u> </u>	(.03)	
	Chi-square (degrees of freedom)	.069 (1)	7.50	0 (14)	
	Chi-square p-value	> .05	> .05		
	Loglikelihood	-3908	-3040		
Fit	AIC	7833	6148		
statistics	BIC	7875		321	
5.4151165	RMSEA (90% confidence interval)	.000		000	
		(.000, .043)), .011)	
	CFI	1.000		000	
	TLI	1.004	1.	031	

Table I.1: Latent growth curve models for perceptions of teacher support (PISA) (N=1224)

Interaction between TY participation and age was tested. However, the interaction term was not statistically significant and did not improve model fit so has been omitted from the final model.

Initial status: R² = .12, t = 5.53, p < .001. Slope: R² = .36, t = 1.26, ns.

		Model A	Model B	
		b (SE)	b (SE)	β (SE)
	Intercept	3.80 (.05)***	3.75 (.11)***	5.63 (.36)***
	TY participant (Ref: non-participant)	-	.21 (.07)**	.31 (.10)**
	Male (Ref: female)	-	09 (.07)	14 (.11)
	Age (centered)	-	.16 (.05)**	.11 (.04)**
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	11 (.09)	16 (.13)
	Third level	-	09 (.07)	13 (.11)
Initial	Home language (Ref: English/Irish)			
status	Another language	-	00 (.02)	00 (.04)
(baseline)	Weekly hours homework (centered)	-	.02 (.00)***	.18 (.04)***
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	12 (.10)	19 (.15)
	Degree	-	.13 (.11)	.19 (.16)
	Don't know	-	.13 (.13)	.19 (.19)
	Know what job would like (Ref: Yes)			
	Maybe	-	03 (.06)	05 (.09)
	No	-	15 (.09)	22 (.14)
	Intercept	.36 (.24)	.35 (.25)	1.72 (.87)*
	Initial status	10 (.60)	10 (.07)	31 (.16)
	TY participant (Ref: non-participant)	-	.05 (.05)	.23 (.22)
	Male (<i>Ref: female</i>)	-	.03 (.03)	.15 (.17)
	Age (centered)	-	.01 (.04)	.02 (.08)
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	06 (.04)	27 (.18)
Slope	Third level	-	.03 (.02)	.14 (.12)
(rate of	Home language (Ref: English/Irish)			
change)	Another language	-	.00 (.01)	.02 (.06)
change	Weekly hours homework (centered)	-	.00 (.00)	01 (.13)
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	09 (.06)	45 (.25)
	Degree	-	05 (.05)	24 (.25)
	Don't know	-	.05 (.06)	.23 (.29)
	Know what job would like (Ref: Yes)			
	Maybe	-	.02 (.03)	.07 (.15)
	No	-	00 (.05)	01 (.22)
(Residual)	Initial status	.20 (.05)***	1	(.04)***
Variance	Slope	.03 (.02)		(.02)
	Chi-square (degrees of freedom)	2.327 (1)		35 (14)
	Chi-square p-value	>.05	>.05	
	Loglikelihood	-3604		772
Fit	AIC	7225		513
statistics	BIC	7267		787
	RMSEA (90% confidence interval)	.029 (.000, .080)		00, .023)
	CFI	1.000		.00
	TLI	1.000	1.	013

Interaction between TY participation and age was tested. However, the interaction term was not statistically significant and did not improve model fit so has been omitted from the final model.

R² = .11, t = 4.95, p < .001. Initial status: Slope: R² = .18, t = 2.27, P = .023.

		Model A Model B			
		b (SE)	b (SE)	β (SE)	
	Intercept	3.56 (.03)***	3.40 (.09)***	5.91 (.03)***	
	TY participant (Ref: non-participant)	-	.20 (.07)**	.34 (.11)**	
	Male (<i>Ref: female</i>)	-	05 (.04)	09 (.07)	
	Age (centered)	-	.03 (.05)	.02 (.04)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	00 (.05)	01 (.09)	
	Third level	-	04 (.04)	07 (.07)	
Initial	Home language (Ref: English/Irish)				
status	Another language	-	.03 (.01)*	.05 (.02)*	
(baseline)	Weekly hours homework (centered)	-	.03 (.00)***	.33 (.04)***	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.00 (.09)	.00 (.15)	
	Degree	-	.23 (.07)***	.39 (.12)***	
	Don't know	-	01 (.07)	01 (.12)	
	Know what job would like (Ref: Yes)				
	Maybe	-	03 (.05)	06 (.08)	
	No	-	18 (.07)**		
	Intercept	.18 (.14)	.25 (.20)	1.71 (.08)*	
	Initial status	05 (.04)	08 (.06)	32 (.14)*	
	TY participant (Ref: non-participant)	-	01 (.03)	10 (.22)	
	Male (<i>Ref: female</i>)	-	04 (.03)	27 (.20)	
	Age (centered)	-	01 (.03)	02 (.09)	
	Maternal education (<i>Ref: Upper sec.</i>)				
	Primary/ Lower secondary	-	05 (.05)	34 (.38)	
	Third level	-	01 (.02)	08 (.14)	
Slope	Home language (Ref: English/Irish)				
(rate of	Another language	-	.01 (.01)	.07 (.04)	
change)	Weekly hours homework (centered)	-	.00 (.00)	.02 (.11)	
	Educational aspirations (Ref: LCE)			. ,	
	PLC/Certificate	-	.09 (.05)	.64 (.39)	
	Degree	-	.06 (.04)	.45 (.24)	
	Don't know	-	.06 (.05)	.41 (.32)	
	Know what job would like (Ref: Yes)		, <i>,</i>	. /	
	Maybe	-	.03 (.03)	.22 (.24)	
	No	-	.07 (.03)*	.50 (.36)	
(Residual)	Initial status	.32 (.03)***	+ ` <i>`</i>	(.03)***	
Variance	Slope	.02 (.01)	1	(.01)	
	Chi-square (degrees of freedom)	6.33 (1)	_	9 (14)	
	Chi-square p-value	<.05		.05	
	Loglikelihood	-3024		248	
Fit	AIC	6065		563	
statistics	BIC	6108		737	
	RMSEA (90% confidence interval)	.058 (.022, .105)		14, .045)	
	CFI	.989	-	982	
	TLI	.968		945	

Table I.3: Latent growth curve models for engagement in learning (N=1226)

R² = .25, t = 8.19, p < .001. R² = .22, t = 2.16, p = .031. Initial status: Slope:

		Model A	Model A Model B		
		b (SE)	b (SE)	β (SE)	
	Intercept	3.924 (.06)***	3.75 (.17)***	4.20 (.03)***	
	TY participant (Ref: non-participant)	-	.27 (.09)**	.13 (.05)**	
	Male (Ref: female)	-	18 (.06)**	10 (.03)**	
	Age (centered)	-	.04 (.06)	.02 (.03)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	18 (.10)	07 (.04)	
	Third level	-	07 (.06)	04 (.03)	
Initial	Home language (Ref: English/Irish)				
status	Another language	-	.06 (.02)**	.10 (.04)**	
(baseline)	Weekly hours homework (centered)	-	.03 (.00)***	.25 (.03)***	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.15 (.13)	.06 (.05)	
	Degree	-	.43 (.11)***	.24 (.06)***	
	Don't know	-	.05 (.16)	.01 (.04)	
	Know what job would like (Ref: Yes)				
	Maybe	-	13 (.06)*	07 (.04)*	
	No	-	31 (.10)**	13 (.04)**	
	Intercept	.42 (.18)*	.21 (.24)	.59 (.61)	
	Initial status	10 (.05)*	09 (.06)	24 (.13)	
	TY participant (Ref: non-participant)	-	.09 (.06)	.10 (.07)	
	Male (<i>Ref: female</i>)	-	.02 (.06)	.03 (.08)	
	Age (centered)	-	.06 (.04)	.07 (.05)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	07 (.07)	08 (.08)	
Slope	Third level	-	.03 (.03)	.05 (.04)	
(rate of	Home language (Ref: English/Irish)				
change)	Another language	-	02 (.01)*	09 (.05)	
5-7	Weekly hours homework (centered)	-	00 (00)	04 (.08)	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.04 (.06)	.05 (.07)	
	Degree	-	.04 (.05)	.06 (.07)	
	Don't know	-	.15 (.06)	.11 (.07)	
	Know what job would like (Ref: Yes)				
	Maybe	-	.08 (.06)	.11 (.09)	
<u> </u>	No	-	.06 (.06)	.07 (.07)	
(Residual)	Initial status	.82 (.08)***	-	08)*** 02)***	
Variance	Slope	.12 (.02)***	L	03)***	
	Chi-square (degrees of freedom)	2.55(1)		4 (14)	
	Chi-square p-value	>.05	>.05		
- '+	Loglikelihood	-4515		460	
Fit	AIC	9047		988	
statistics	BIC	9089		162	
	RMSEA (90% confidence interval)	.032 (.000, .082)	-	00, .018)	
	CFI	.999		000	
	TLI	.996	1.	017	

Table I.4: Latent growth curve models for school satisfaction (N=1226)

Interaction between TY participation and gender was tested. However, the interaction term was not statistically significant and did not improve model fit so has been omitted from the final model.

Initial status: R² = .21, t = 7.41, p < .001. R² = .11, t = 3.25, p = .001. Slope:

		Model A Model B		
		b (SE)	b (SE)	β (SE)
	Intercept	4.36 (.03)***	4.20 (.13)***	5.52 (.34)***
	TY participant (Ref: non-participant)	-	.18 (.07)**	.24 (.10)*
	Male (<i>Ref: female</i>)	-	.06 (.05)	.08 (.07)
	Age (centered)	-	.16 (.06)**	.09 (.04)**
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	00 (.18)	00 (.15)
	Third level	-	06 (.06)	08 (.08)
Initial	Home language (Ref: English/Irish)			
status	Another language	-	.01 (.01)	.01 (.01)
(baseline)	Weekly hours homework (centered)	-	.02 (.01)***	.14 (.04)***
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	01 (.11)	02 (.15)
	Degree	-	.12 (.09)	.16 (.12)
	Don't know	-	08 (.08)	10 (.19)
	Know what job would like (Ref: Yes)			, <i>,</i>
	Maybe	-	04 (.08)	06 (.11)
	No	-	06 (.11)	08 (.15)
	Intercept	.34 (.20)	.13 (.32)	.68 (.1.49)
	Initial status	09 (.05)	04 (.07)	15 (.22)
	TY participant (Ref: non-participant)	-	02 (.04)	08 (.20)
	Male (Ref: female)	-	.04 (.03)	.20 (.16)
	Age (centered)	-	.00 (.04)	.00 (.08)
	Maternal education (<i>Ref: Upper sec.</i>)			
	Primary/ Lower secondary	-	04 (.05)	18 (.26)
	Third level	-	.03 (.03)	.14 (.13)
Slope	Home language (Ref: English/Irish)			,
(rate of	Another language	-	.02 (.01)	.10 (.09)
change)	Weekly hours homework (centered)	-	.00 (.00)	.01 (.10)
	Educational aspirations (<i>Ref: LCE</i>)			
	PLC/Certificate	-	02 (.05)	08 (.25)
	Degree	-	02 (.04)	12 (.19)
	Don't know	-	.05 (.07)	.25 (.36)
	Know what job would like (<i>Ref: Yes</i>)			(,
	Maybe	-	.01 (.05)	.06 (.26)
	No	-	02 (.06)	09 (.27)
(Residual)	Initial status	.63 (.07)***		08)***
Variance	Slope	.34 (.20)	-	(.03)
	Chi-square (degrees of freedom)	4.62 (1)	L	7 (14)
	Chi-square p-value	<.05	>.05	
	Loglikelihood	-4120	-3273	
Fit	AIC	8256	-3273 6615	
statistics	BIC	8299		789
statistics	RMSEA (90% confidence interval)	.048 (.012, .096)		00, .033)
			.017 (.0	
	CFI	.994		995

Table I.5: Latent growth curve models for global life satisfaction (N=1225)

* p ≤.05 ** p ≤.01 *** p ≤.001

Interaction between TY participation and age was tested. However, the interaction term was not statistically significant and did not improve model fit so has been omitted from the final model.

R² = .06, t = 3.01, p = .003. Initial status: R² = .08, t = 1.54, ns. Slope:

		Model A	Model A Model B		
		b (SE)	b (SE)	β (SE)	
	Intercept	4.63 (.04)***	4.37 (.10)***	6.59 (.41)***	
	TY participant (Ref: non-participant)	-	.16 (.08)*	.23 (.12)*	
	Male (<i>Ref: female</i>)	-	.25 (.07)***	.38 (.11)***	
	Age (centered)	-	.17 (.05)***	.11 (.03)***	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	05 (.09)	07 (.14)	
	Third level	-	02 (.05)	03 (.07)	
Initial	Home language (Ref: English/Irish)				
status	Another language	-	.04 (.02)*	.06 (.03)*	
(baseline)	Weekly hours homework (centered)	-	.01 (.00)*	.08 (.03)*	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	04 (.11)	06 (.17)	
	Degree	-	.16 (.05)***	.25 (.07)***	
	Don't know	-	00 (.12)	00 (.18)	
	Know what job would like (Ref: Yes)				
	Maybe	-	08 (.05)	12 (.07)	
	No	-	09 (.06)	13 (.09)	
	Intercept	.03 (.19)	.10 (.24)	.48 (1.11)	
	Initial status	01 (.04)	.03 (.06)	11 (.17)	
	TY participant (Ref: non-participant)	-	01 (.03)	05 (.14)	
	Male (Ref: female)	-	.04 (.03)	.19 (.11)	
	Age (centered)	-	.02 (.03)	.04 (.06)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	03 (.05)	14 (.17)	
-	Third level	-	.06 (.03)	.28 (.17)	
Slope	Home language (Ref: English/Irish)				
(rate of	Another language	-	.01 (.01)	.03 (.05)	
change)	Weekly hours homework (centered)	-	.00 (.00)	.06 (.10)	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.07 (.04)	.33 (.24)	
	Degree	-	04 (.04)	22 (.23)	
	Don't know	-	.09 (.06)	.44 (.36)	
	Know what job would like (Ref: Yes)				
	Maybe	-	.01 (.04)	.06 (.21)	
	No	-	03 (.03)	13 (.16)	
(Residual)	Initial status	.44 (.04)***	<u> </u>	04)***	
Variance	Slope	.03 (.02)	.03	(.02)	
	Chi-square (degrees of freedom)	2.31 (1)	10.2	6 (.14)	
	Chi-square p-value	>.05	>.05		
	Loglikelihood	-3692	-2	897	
Fit	AIC	7400	58	862	
statistics	BIC	7443	60	035	
	RMSEA (90% confidence interval)	.029 (.000, .080)	.000 (.0	00, .020)	
	CFI	.998		000	
	TLI	.995	1.	014	

Interactions between TY participation and gender and age were tested. However, the interaction terms were not statistically significant and did not improve model fit so have been omitted from the final model.

R² = .10, t = 3.89, p < .001. Initial status: Slope: R² = .11, t = 2.36, p = .018.

		Model A Model B			
		b (SE)	b (SE)	β (SE)	
	Intercept	5.10 (.03)***	5.12 (.11)***	7.08 (.45)***	
	TY participant (<i>Ref: non-participant</i>)	-	.05 (.09)	.07 (.12)	
	Male (Ref: female)	-	01 (.06)	02 (.08)	
	Age (centered)	-	.15 (.05)**	.09 (.03)**	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	02 (.06)	03 (.08)	
	Third level	-	.03 (.05)	.04 (.07)	
Initial	Home language (Ref: English/Irish)				
status	Another language	-	.01 (.01)	.02 (.02)	
(baseline)	Weekly hours homework (centered)	-	.01 (.00)*	.09 (.04)*	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	05 (.09)	06 (.12)	
	Degree	-	.11 (.09)	.15 (.12)	
	Don't know	-	00 (.12)	00 (.16)	
	Know what job would like (Ref: Yes)				
	Maybe	-	15 (.07)*	20 (.10)*	
	No	-	12 (.07)	16 (.11)	
	Intercept	.35 (.30)	.13 (.38)	.07 (1.80)	
	Initial status	07 (.06)	04 (.08)	16 (.25)	
	TY participant (<i>Ref: non-participant</i>)	-	.02 (.04)	.10 (.19)	
	Male (<i>Ref: female</i>)	-	.04 (.03)	.22 (.18)	
	Age (centered)	-	04 (.03)	08 (.09)	
	Maternal education (<i>Ref: Upper sec.</i>)			,	
	Primary/ Lower secondary	-	.07 (.04)	03 (.31)	
	Third level	-	.06 (.06)	.38 (.27)	
Slope	Home language (Ref: English/Irish)			,	
(rate of	Another language	-	.01 (.01)	.04 (.07)	
change)	Weekly hours homework (centered)	-	00 (.00)	08 (.09)	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.04 (.06)	.21 (.37)	
	Degree	-	01 (.06)	05 (.31)	
	Don't know	-	.15 (.06)	.80 (.51)	
	Know what job would like (Ref: Yes)				
	Maybe	-	.00 (.06)	.01 (.31)	
	No	-	09 (.05)	49 (.26)	
(Residual)	Initial status	.54 (.04)***	<u> </u>	(.06)***	
Variance	Slope	.04 (.02)*		(.03)	
	Chi-square (degrees of freedom)	3.13 (1)		2 (.14)	
	Chi-square p-value	>.05		.05	
	Loglikelihood	-4100	-3257		
Fit	AIC	8216		582	
statistics	BIC	8258		756	
	RMSEA (90% confidence interval)	.037 (.000, .086)		00, .025)	
	CFI	.995		000	
	TLI	.986		008	

Table I.7: Latent growth curve models for social self-efficacy (N=1224)

* p ≤.05 ** p ≤.01 *** p ≤.001

Interaction between TY participation and age was tested. However, the interaction term was not statistically significant and did not improve model fit so has been omitted from the final model.

R² = .04, t = 3.28, p = .001. Initial status: R² = .17, t = 1.48, ns. Slope:

		Model A	Model B		
		b (SE)	b (SE)	β (SE)	
	Intercept	4.30 (.03)***	5.08 (.12)***	8.19 (.98)***	
	TY participant (<i>Ref: non-participant</i>)	-	.07 (.08)	.13 (.15)	
	Male (Ref: female)	-	.10 (.04)*	.20 (.10)*	
	Age (centered)	-	01 (.05)	00 (.04)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	06 (.06)	12 (.12)	
	Third level	-	.02 (.05)	.04 (.09)	
Initial	Home language (Ref: English/Irish)				
status	Another language	-	.01 (.02)	.02 (.03)	
(baseline)	Weekly hours homework (centered)	-	.01 (.00)***	.19 (.06)***	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.04 (.08)	.08 (.15)	
	Degree	-	.33 (.07)***	.66 (.15)***	
	Don't know	-	.14 (.09)	.29 (.17)	
	Know what job would like (Ref: Yes)				
	Maybe	-	07 (.04)	14 (.08)	
	No	-	10 (.07)	19 (.14)	
	Intercept	41 (.56)	36 (.65)	-2.17 (4.85)	
	Initial status	.08 (.13)	.03 (.16)	.09 (.50)	
	TY participant (Ref: non-participant)	-	.06 (.05)	.38 (.35)	
	Male (Ref: female)	-	.01 (.03)	.03 (.19)	
	Age (centered)	-	.05 (.04)	.12 (.14)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	01 (.04)	07 (.22)	
<i>c</i> 1	Third level	-	.04 (.03)	.22 (.19)	
Slope	Home language (Ref: English/Irish)				
(rate of	Another language	-	.01 (.01)	.03 (.06)	
change)	Weekly hours homework (centered)	-	00 (.00)	.08 (.18)	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.07 (.05)	.39 (.26)	
	Degree	-	.02 (.07)	.15 (.37)	
	Don't know	-	.03 (.07)	.15 (.41)	
	Know what job would like (Ref: Yes)				
	Maybe	-	.07 (.04)	.41 (.37)	
	No	-	.02 (.05)	.13 (.33)	
(Residual)	Initial status	.26 (.05)***	.20	(.05)***	
Variance	Slope	.01 (.03)	.02	(.03)	
	Chi-square (degrees of freedom)	0.49 (1)	24.1	2 (14)	
	Chi-square p-value	>.05	<.05		
	Loglikelihood	-3476		575	
Fit	AIC	6967		219	
statistics	BIC	7010	53	393	
	RMSEA (90% confidence interval)	.000 (.000, .059)	.024 (.0	04, .040)	
	CFI	1.000	.9	983	
	TLI	1.004	.9	949	

Table I.8: Latent growth curve models for perceived competence (N=1226)

Interaction between TY participation and gender was tested. However, the interaction term was not statistically significant and did not improve model fit so has been omitted from the final model.

Initial status: R² = .18, t = 3.16, p = .002. R² = .13, t = 0.63, ns. Slope:

		Model A Model B			
		b (SE)	b (SE)	β (SE)	
	Intercept	2.69 (.02)***	2.73 (.12)***	4.06 (.025)***	
	TY participant (Ref: non-participant)	-	02 (.08)	03 (.13)	
	Male (Ref: female)	-	09 (.04)*	13 (.06)*	
	Age (centered)	-	.06 (.06)	.04 (.04)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	.03 (.07)	.04 (.10)	
	Third level	-	.03 (.06)	.04 (.08)	
Initial	Home language (Ref: English/Irish)				
status	Another language	-	.04 (.02)*	.06 (.03)*	
(baseline)	Weekly hours homework (centered)	-	.02 (.00)***	.20 (.04)***	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	04 (.08)	06 (.13)	
	Degree	-	.18 (.08)*	.26 (.12)*	
	Don't know	-	18 (.09)	26 (.15)	
	Know what job would like (Ref: Yes)				
	Maybe	-	07 (.06)	10 (.09)	
	<u>No</u>	-	22 (.06)***		
	Intercept	.18 (.05)***	.37 (.14)**		
	Initial status	06 (.04)	12 (.04)***	29 (.08)***	
	TY participant (Ref: non-participant)	-	06 (.05)	23 (.17)	
	Male (<i>Ref: female</i>)	-	05 (.03)	19 (.12)	
	Age (centered)	-	02 (.03)	04 (.05)	
	Maternal education (Ref: Upper sec.)				
	Primary/ Lower secondary	-	04 (.05)	15 (.18)	
Slope	Third level	-	01 (.03)	04 (.10)	
(rate of	Home language (Ref: English/Irish)				
change)	Another language	-	01 (.01)	05 (.03)	
enange,	Weekly hours homework (centered)	-	.00 (.00)	.02 (.07)	
	Educational aspirations (Ref: LCE)				
	PLC/Certificate	-	.01 (.04)	.02 (.15)	
	Degree	-	.01 (.04)	.04 (.16)	
	Don't know	-	.13 (.07)	.48 (.28)	
	Know what job would like (Ref: Yes)				
	Maybe	-	.05 (.04)	.17 (.13)	
	No	-	.05 (.05)	.19 (.18)	
(Residual)	Initial status	.42 (.05)***		05)***	
Variance	Slope	.04 (.01)***	+i-	01)***	
	Chi-square (degrees of freedom)	1.43 (1)		1 (14)	
	Chi-square p-value	>.05	>.05		
	Loglikelihood	-3925		078	
Fit	AIC	7867		223	
statistics	BIC	7910		497	
	RMSEA (90% confidence interval)	.017 (.000, .072)		00, .031)	
	CFI	.999		97	
	TLI	.998	.0	990	

Table I.9: Latent growth curve models for autonomous motivation (N=1226)

Interaction between TY participation and gender was tested. However, the interaction term was not statistically significant and did not improve model fit so has been omitted from the final model.

R² = .12, t = 7.03, p < .001. Initial status: R² = .13, t = 3.49, p < .001. Slope:

		Model A Model B		
		b (SE)	b (SE)	β (SE)
	Intercept	2.78 (.03)***	2.86 (.08)***	5.07 (.22)***
	TY participant (Ref: non-participant)	-	08 (.07)	11 (.10)
	Male (<i>Ref: female</i>)	-	06 (.05)	08 (.08)
	Age (centered)	-	07 (.06)	04 (.04)
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	.05 (.08)	.07 (.11)
	Third level	-	.00 (.06)	.00 (.08)
Initial	Home language (Ref: English/Irish)			
status	Another language	-	03 (.01)*	04 (.02)*
(baseline)	Weekly hours homework (centered)	-	03 (00)***	31 (.03)***
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	.05 (.09)	.07 (.13)
	Degree	-	23 (.08)**	33 (.12)**
	Don't know	-	.17 (.12)	.24 (.18)
	Know what job would like (Ref: Yes)			
	Maybe	-	.11 (.07)	.16 (.10)
	No	-	.22 (.06)***	.32 (.08)***
	Intercept	.22 (.15)	.27 (.16)	1.17 (.51)*
	Initial status	08 (.05)	07 (.06)	20 (.14)
	TY participant (Ref: non-participant)	-	.00 (.03)	.01 (.11)
	Male (<i>Ref: female</i>)	-	.03 (.03)	.14 (.13)
	Age (centered)	-	.03 (.04)	.05 (.06)
	Maternal education (Ref: Upper sec.)			
	Primary/ Lower secondary	-	.04 (.06)	.16 (.27)
<i>c</i> 1	Third level	-	.00 (.03)	.01 (.12)
Slope	Home language (Ref: English/Irish)			
(rate of	Another language	-	01 (.01)	04 (.03)
change)	Weekly hours homework (centered)	-	.00 (.00)	.00 (.07)
	Educational aspirations (Ref: LCE)			
	PLC/Certificate	-	11 (.05)*	45 (.24)
	Degree	-	07 (.03)*	27 (.15)
	Don't know	-	11 (.06)	46 (.28)
	Know what job would like (Ref: Yes)			
	Maybe	-	06 (.04)	24 (.19)
	No	-	05 (.04)	19 (.19)
(Residual)	Initial status	.51 (.04)***	.39 (.03)***
Variance	Slope	.06 (.02)**	.05 (.02)**
	Chi-square (degrees of freedom)	.47 (1)	8.76	5 (14)
	Chi-square p-value	>.05	>	.05
	Loglikelihood	-3718	-2	866
Fit	AIC	7453	58	301
statistics	BIC	7496	59	974
	RMSEA (90% confidence interval)	.000 (.000, .059)	.000 (.0	00, .016)
	CFI	1.000	1.	000
	TLI	1.003	1.	018

R² = .21, t = 10.09, p < .001. R² = .09, t = 1.73, ns. Initial status: Slope: