Relationship Between Learning Motivation and Learner Autonomy Among Chinese English Language University Students

Ruth Wong[1]* and Yuan Luo[2]

[1]The Education University of Hong Kong

[2]Anyang Normal University, China

Abstract

English language teaching in China has recently undergone significant development from a traditional teacher-centred approach to one that is more student-centred. How to develop students' motivation and cultivate their awareness of autonomous learning have become important questions for educators. This study aimed to explore the relationship between motivation to learn English and learner autonomy, drawing on culture-relevant theoretical frameworks and using questionnaire data obtained from 201 undergraduate students learning English as a foreign language in two universities in China. Results indicate a significant positive correlation between learner autonomy and motivation to learn English ($r=.51$; $p<.01$). Significant positive correlations between dimensions of motivation and learner autonomy were also found ($.4 < r < .6$). Implications of the findings for English language teaching and learning are discussed.

Keywords: learning motivation, learner autonomy, Chinese EFL university students

Author Note

*Ruth Wong can be contacted at wongmh@eduhk.hk

In China, the study of learning motivation began in the 1980s when it was considered to be one of the most important variables contributing to successful language acquisition. Since then, educational researchers have described motivation to learn English as a foreign language (EFL) among Chinese university students in terms of a

range of approaches. Some have argued that Chinese students' motivation is mainly instrumental. This view was supported by Shi (2000) and more recently by Li (2014). Using mixed research methods, Gao (2002) also described the main motivation underlying Chinese university students' efforts to learn English as instrumental. In a study that examined the influence of personal factors on student motivation to learn English as a foreign language, Gao et al. (2003) subsequently carried out research involving 2,278 Chinese undergraduate students from more than 30 colleges and universities. Their results, based on factor analysis, revealed the following seven components of motivation associated with learning English: intrinsic interest, immediate achievement, learning environment, going abroad, social responsibility, personal development and information media.

From the early 1990s, a growing number of international studies investigated the relationship between Chinese EFL learners' motivation to learn English and learner autonomy. Some researchers took the view that motivation precedes learner autonomy (e.g., Dickinson, 1995; Ushioda, 1996). Littlewood (1999) argued that learners' confidence and willingness to take responsibility for their learning are the core notions of autonomy. Xu (2004) considered learning motivation essential to fostering learner autonomy, and that learner autonomy can be enhanced by activating learning motivation. Pang (2001) also identified learning motivation as the key variable in influencing autonomous learning. In contrast, other scholars took the view that learner autonomy precedes motivation. In the United States, Deci and Ryan (1985) claimed that "intrinsic motivation will be operative and effective when action and learning environments are experienced as autonomous" (p. 29), arguing that learner autonomy provides conditions for the development of intrinsic motivation. There is also support for the idea of a less static relationship between motivation and autonomy. Dickinson (1995) pointed to evidence that motivation can be increased on condition that learners are responsible for their learning, are able to manage their learning process and can attribute success or failure to their own efforts. Ushioda (1996) also proposed that the relationship between motivation and autonomous learning is dynamic and multi-directional, and that the intensity and types of motivation are changeable during the learning processes. Clearly, the relationship between motivation and learner autonomy is not easily defined.

The Current Study

This body of research suggests that there is value in examining whether and to what extent there is a correlation between motivation and learner autonomy. Only a few such empirical studies have been conducted in the Chinese EFL context. The present study aimed to answer the following questions:

1) To what extent are Chinese university students motivated to learn English?

2) Do Chinese university students possess strong learner autonomy?

3) Is there a correlation between motivation to learn English and learner autonomy?

Theoretical Framework

Learning Motivation

Gardner and Lambert (1959; 1972) and Deci and Ryan (1985) are widely cited in motivation research; however, their theories and frameworks do not clearly demonstrate the dynamic nature of motivation, especially in the Chinese EFL context. Gao et al.'s (2003) theory of three dimensions of motivation (instrumental, cultural and situational) embodied by the seven components identified above is more specific and inclusive. Instrumental motivation refers to the extent to which students regard the target language as a tool to achieve their specific purposes such as good performance. Cultural motivation relates to students' interest in the culture of both the target language (such as that reflected in intrinsic interest or interest in going abroad) and of their own first language (e.g., reflected in a commitment to social responsibility). This differs from Gardner and Lambert's integrative motivation that focuses only on the culture of the target language without concern for the culture of the learner's language. Situational motivation refers to the influence of the micro-learning situation on learners. This study adopted Gao's three-dimensional framework of seven components of motivation to examine the association between learning motivation and learner autonomy among Chinese EFL university students.

Learner Autonomy

The concept of learner autonomy has drawn on a number of theories. The most influential ones are from cognitive psychology, humanism and constructivism. Each of these perspectives assumes that English language teaching should adopt a student-centred approach and provide rational and theoretical bases for the development of learner autonomy. Cognitive psychology research (e.g., Aizawa, 2017) emphasises the effects of thought on behaviour. According to this perspective, learners are active participants who should make use of different mental strategies to acquire languages – they are encouraged to understand concepts independently but under teachers' guidance. Humanism (e.g., Stevik, 1990) emphasises the inner-directed, conscious motivations and self-directed goals of individuals, and focuses on understanding, personal responsibility and self-actualisation. It contends that teachers should know that students may have different needs and learning styles; try to respond accordingly rather than imposing their own ideas; and help students to independently make choices for what and how they learn. Students, for their part, should take responsibility for their choices by making use of their own experiences freely and creatively. Constructivism takes the view that knowledge is created by learners through an active mental process of development. Supporting this view, Kabiri et al. (2018) argue that autonomous students have the competence to learn independently and deliberately through identification, formulation and restructuring of objectives, by developing and executing plans and by engaging in self-monitoring. Based on these three theoretical perspectives, Xu (2004) summarised five elements of learner autonomy specifically

relevant to Chinese students learning English as a foreign language: 1) to know the teachers' teaching aims and requirements; 2) to establish learning objectives and develop a learning plan; 3) to implement learning strategies efficiently; 4) to monitor the implementation of learning strategies; and 5) to monitor and evaluate the process of learning English. Xu's framework was used to represent the concept of learner autonomy in the questionnaire administered in this study.

Method

Participants

A total of 201 undergraduate students ranging in age from 19 to 21 years were chosen randomly from two universities in China (University A and University B). Of these, 105 (38 men, 67 women) were attending University A, majoring in Education, Law, Mathematics, Chemistry and Teaching Chinese as a Foreign Language and 96 (34 men, 62 women) were attending University B, majoring in Arts, Industry, Engineering and Geographic Information Systems and Science. All participants entered university in 2014 with nine years' experience of English language learning on average.

Instruments

Quantitative data were collected in 2016 using a questionnaire based on the Gao et al. (2003) and Xu (2004) frameworks described above. To avoid misunderstanding of items, the questionnaire was written in Chinese (the first language of the university undergraduates). It consisted of two sections. In Section 1, personal details were obtained on the age and gender of participants, the university they were attending, the courses they were enrolled in and their grades. Section 2 comprised two parts: Part A investigated learning motivation and Part B examined autonomous learning competence. A Likert-type scale and rating structure were employed.

Part A of Section 2 is a revised version of Gao et al.'s (2003) motivation framework based on 30 items divided into seven categories: 'intrinsic interest' (MII; 7); 'immediate achievement' (MIA; 3); 'learning situation' (MLS; 4); 'going abroad' (MGA; 3); 'social responsibility' (MSR; 4); 'individual development' (MID; 6); and 'information media' (MIM; 3) (Table 1). Reasons for adopting Gao et al.'s (2003) questionnaire include: 1) it had been used in a stratified sample with 2,278 Chinese undergraduate students across 30 universities in 29 provinces, regions and municipalities, thereby providing a systematic, scientific and statistical basis for investigation; and 2) it had high overall reliability according to the results of a pilot test. Part B aimed to investigate learner autonomy. It was based on Xu's (2004) analysis of learner autonomy and also contained 30 items underpinning the following five elements or dimensions: 'identifying teachers' goals' (AEL1; 3); 'setting appropriate objectives and plans' (AEL2; 5); 'selecting and implementing learning strategies' (AEL3; 5); 'monitoring the strategies used' (AEL4; 7); and 'evaluating the learning process' (AEL5; 10) (Table 1). Xu's framework was used

in the questionnaire because: 1) it had proved to be valid and reliable in a large-sample investigation of Chinese undergraduate English language teaching and learning (Xu, 2004); 2) it reflected the characteristics of autonomous English language learners outlined by Dickinson (1995) and Chan (2001) which included being active and independent, setting goals, and monitoring own learning; and 3) it had been used by other researchers including Boggu and Sundarsingh (2019) and Wen-Cheng et al. (2019).

A test of the reliability of the questionnaire was carried out by computing Cronbach's alpha coefficients. A value of 0.70 or higher is regarded as acceptable and sufficient, according to Taber (2018). The reliability coefficients for motivation (r=.82) and learner autonomy (r=.90) tested in a pilot study were both above this threshold.

TABLE 1

Variables and Distributions of Questionnaire Items

Variables	Acronyms	Questionnaire Items
Motivation		
Intrinsic interest	MII	1, 3, 4, 5, 18, 21, 23
Immediate achievement	MIA	9, 17, 22
Learning situation	MLS	6, 7, 8, 10
Going abroad	MGA	24, 25, 28
Social responsibility	MSR	2, 14, 16, 30
Individual development	MID	11, 12, 13, 19, 26, 27
Information media	MIM	15, 20, 29
Learner Autonomy		
Identifying teachers' goals	AEL1	31, 32, 33
Setting appropriate objectives and plans	AEL2	34, 35, 36, 37, 38
Selecting and implementing learning strategies	AEL3	39, 40, 41, 42, 43
Monitoring the strategies used	AEL4	44, 45, 46, 47, 48, 49, 50
Evaluating the learning process	AEL5	51, 52, 53, 54, 55, 56, 57, 58, 59, 60

Data Collection

The questionnaire was given to 105 students of Education, Law, Mathematics, Chemistry and Teaching Chinese as a foreign language in University A and to 96 students of Arts, Industry, Engineering and Geographic Information Systems and Science in University B. Prior to completing the questionnaire, students were informed by their English teachers that their identities would remain confidential, and that their answers would be used only for the purposes of the current research. They were given 30 minutes to complete the questionnaire on site.

Data Analysis

The questionnaire data were analysed using SPSS to obtain descriptive statistics including percentages and mean scores. Pearson correlation coefficients were then computed to examine associations between motivation and autonomy variables. Finally, multiple linear regression was conducted with autonomy as the outcome and the motivation measures as the explanatory variables. Since the aim of the study was to establish the multivariate associations between motivation and autonomy, and due to the small sample size, data on respondent gender and course were not included in the regression model.

Results

Learning Motivation Associated with English Language Learning

Mean scores and standard deviations for overall learning motivation and the seven components of motivation are shown in Table 2. A mean of 3.1 suggests a medium level of overall learning motivation among undergraduates. 'Individual development' has the highest score (M=3.5) among the seven components of motivation, followed closely by 'social responsibility' (M=3.4) and 'immediate achievement' (M=3.3). Motivation in relation to 'learning situation' with a mean of 3.1 has a score that is slightly above that for motivations relating to 'information media' and 'intrinsic interest' (both with a mean of 2.9). The weakest motivation component, 'going abroad', has a mean score of 2.8.

TABLE 2

Descriptive Statistics for Learning Motivations

Motivation Variables	N	Mean	SD
Intrinsic interest	201	2.9	0.59
Immediate achievement	201	3.3	0.87
Learning situation	201	3.0	0.84
Going abroad	201	2.8	0.68
Social responsibility	201	3.4	0.56
Individual development	201	3.5	0.56
Information media	201	2.9	0.63
Overall motivation	201	3.1	0.37

Percentages for each item response category, mean scores and standard deviations for all 30 learning motivation items are presented in Table 3. Results show that one-third of the means are 3.4 or above. That is, the relevant motivations could be described as relatively strong. The remainder of mean scores are between 2.6 and 3.4, except for item 28 (I learn English in order to emigrate to foreign countries) under the 'going abroad' motivation component which has a mean score of just 2.4.

TABLE 3

Percentages and Mean Scores for Items on Learning Motivation Components

Motivation Components	Items	Percent					Mean	SD
		1 (Strongly disagree)	2	3	4	5 (Strongly agree)		
Intrinsic interest	1. I fell in love with English at first sight.	7.5	47.3	26.9	12.9	5.5	2.6	0.99
	3. The love for English songs and movies makes me interested in English.	1.5	32.3	24.4	40.8	1.0	3.1	0.91
	4. The love for English literature makes me interested in English.	7.5	47.8	22.4	21.9	.5	2.6	0.93
	5. I have a special talent for language learning.	1.0	32.3	30.3	30.8	5.5	3.1	0.94
	18. I learn English because I am interested in the people of English-speaking countries.	3.0	33.3	30.8	30.8	2.0	3.0	0.92
	21. I learn English because I like the English language itself.	1.0	35.8	25.4	36.8	1.0	3.0	0.90
	23. I learn English because I am interested in the history and culture of English-speaking countries.	5.0	31.8	36.8	23.9	2.5	2.9	0.92
Immediate achievement	9. The motivation for my English learning largely depends on my English achievement.	1.0	20.9	13.9	59.2	5.0	3.5	0.91
	17. Getting a graduation diploma is the main motivation for my English learning.	2.5	37.3	19.9	38.8	1.5	3.0	0.96
	22. The main purpose for my English learning is to pass various certificate examinations like CET 4/6.	1.0	18.4	19.4	57.7	3.5	3.4	0.87
Learning situation	6. The motivation for my English learning largely depends on whether I like my English teacher.	1.5	41.8	23.9	32.3	.5	2.9	0.90
	7. The motivation for my English learning largely depends on the teaching material.	2.5	47.3	21.4	27.9	1.0	2.8	0.92
	8. The motivation for my English learning largely depends on the quality of the English class.	1.5	32.3	28.4	35.8	2.0	3.0	0.91
	10. The motivation for my English learning largely depends on the atmosphere in class.	1.0	20.4	18.4	56.2	4.0	3.4	0.89
Going abroad	24. I learn English to get better work and study opportunities abroad.	1.5	30.8	25.4	40.3	2.0	3.1	0.92
	25. I learn English for the purpose of going abroad to experience the culture of English-speaking countries.	3.5	30.3	31.3	32.8	2.0	3.0	0.93
	28. I learn English in order to emigrate to foreign countries.	9.0	57.2	21.9	11.4	.5	2.4	0.82

TABLE 3 (contd)

Motivation Components	Items	1 (Strongly disagree)	2	3	4	5 (Strongly agree)	Mean	SD
				Percent				
Social responsibility	2. I learn English because my parents and my school asked me to do so.	2.0	13.9	6.0	64.7	13.4	3.7	0.93
	14. If I have a good command of English, I can live up to my parents' expectations.	1.5	26.4	18.4	45.3	8.5	3.3	1.0
	16. If I have a good command of English, I can contribute to the prosperity of China.	2.0	23.9	30.8	36.8	6.5	3.2	0.95
	30. I learn English for the purpose of making China well known to the world.	0	31.3	28.9	35.8	4.0	3.1	0.91
Individual development	11. I can get a sense of accomplishment if I am good at English.	.5	13.4	21.9	58.2	6.0	3.6	0.82
	12. Having a good command of English is very important for me because it is a very useful communication tool in the current society.	1.5	10.4	10.0	62.7	15.4	3.8	0.88
	13. If I have a good command of English, I can find a satisfying job.	1.5	18.4	21.4	53.2	5.5	3.4	0.90
	19. The direct purpose for my English learning is to get high marks in the school entrance examinations and job-hunting examinations.	1.5	20.4	16.9	58.7	2.5	3.4	0.89
	26. Speaking fluent English is a symbol of being well educated.	1.0	21.9	21.4	51.7	4.0	3.4	0.90
	27. English is a stepping stone on the road of life.	1.0	14.9	18.4	62.2	3.5	3.5	0.83
Information media	15. I learn English in order to better learn other professional courses.	2.5	23.9	27.9	43.8	2.0	3.2	0.91
	20. I learn English in order to be well informed of the economic and technology developments in foreign countries.	4.0	35.3	31.3	26.9	2.5	2.9	0.93
	29. I learn English in order to publish papers in English or read English literature to enlarge my horizon.	4.5	44.3	24.9	25.4	1.0	2.7	0.92

1=strongly disagree; 2=disagree; 3=not sure; 4=agree; 5=strongly agree

Students showed some interest in learning English for reasons to do with 'going abroad'. While only about one in eight (11.9%) reported that they wanted to emigrate to foreign countries (item 28), more than one-third (34.8%) expressed interest in experiencing the culture of English-speaking countries (item 25) and more than four in ten (42.3%) reported learning English to get better work and study opportunities abroad (item 24). About one-third (32.8%) claimed to be learning English because of their interest in the people of English-speaking countries (item 18) while just over one-quarter (26.4%) reported doing so for reasons to do with culture and history (item 23). Only about one-fifth (22.4%) reported learning English because of their love for English literature (item 4).

Although teachers are generally known to be one of the motivating factors for students' English language learning, only 32.8% of students agreed that their motivation to learn English largely depended on whether they liked their teacher (item 6) so this motivational aspect of students' 'learning situation' was not considered very important.

Students generally did not see learning English as a means to acquire knowledge about economic and technology developments in foreign countries. Only 29.4% indicated that they were learning English for this reason (item 20); a smaller proportion (26.4%) indicated they were interested in publishing papers in English or in reading English literature to broaden their horizons (item 29).

The highest motivation levels among undergraduate students were revealed in response to item 12 (M=3.8); 78.1% indicated that they were learning English because they saw it as a very useful communication tool for their 'individual development'. The scores for two additional 'individual development' items (11 and 27) with means of 3.6 and 3.5 respectively are also relatively high: 64.2% of students indicated they could get a sense of accomplishment if they had a good command of English (item 11) while a similar proportion (65.7%) regarded English as a stepping stone to personal advancement on the road of life (item 27).

The second highest motivation level was revealed in responses to item 2 relating to 'social responsibility', with a mean score of 3.7, and 78.1% of students reporting that they were learning English because their parents and school had asked them to do so (item 2).

More than six in ten (64.2% and 61.2% respectively) indicated that their motivation for learning English largely depended on their English achievement (item 9, M=3.5) and/or their wish to pass various school entrance examinations (item 22, M=3.4). These two items were categorised as motivations relating to 'immediate achievement'.

Learner Autonomy Associated with English Language Learning

Analysis of the learner autonomy variables revealed a medium level of overall autonomous competence (AEL) with a mean score of 3.2 (Table 4). Among the

autonomy components examined, the highest mean score of 3.4 is associated with 'identifying teachers' goal' (AEL1). This is followed by 'selecting and implementing learning strategies' (AEL3), 'monitoring the strategies used' (AEL 4), and 'setting appropriate objectives and plans' (AEL 2), all of which have mean scores of 3.2. Of the five learner autonomy components, 'evaluating the learning process' (AEL 5) had the lowest score (M=3.1).

Percentages for each item response and means for individual items associated with learner autonomy are shown in Table 5. All 30 items were found to have means greater than or equal to 2.9 with just five items (31, 33, 41, 42 and 54) having higher mean scores of 3.4 or above.

TABLE 4

Descriptive Statistics for Learner Autonomy

Learner Autonomy Variables	Items	Mean	SD
Identifying teachers' goals (AEL1)	31-33	3.4	0.71
Setting appropriate objectives and plans (AEL2)	34-38	3.2	0.68
Selecting and implementing learning strategies (AEL3)	39-43	3.2	0.66
Monitoring the strategies used (AEL4)	44-50	3.2	0.63
Evaluating the learning process (AEL5)	51-60	3.1	0.61
Overall learner autonomy	31-60	3.2	0.51

For autonomy variables relating to 'identifying teachers' goal', the results illustrate that 53.3% of students considered themselves able to understand teachers' intended teaching objectives (item 31, M=3.4) while 59.2% reported that they could keep up with the teaching pace and adjust their own pace (item 33, M=3.4). A much smaller proportion (38.4%) reported that they could convert the teaching targets of their teachers into their own learning goals (item 32, M=3.2), with about the same proportion (39.8%) indicating that they were unsure of being able to do this.

Of the five items relating to 'setting appropriate learning objectives and plans' (AEL 2), items 35 and 36 had only slightly higher mean scores than those for the other three items (3.2 compared to 3.1). About four in ten students (39.8%) were in agreement that they could set learning goals according to their own needs (item 35), though 37.8% were not sure, while 39.3% indicated that they were clear about their need to improve their English. Similar proportions reported that they were able to properly arrange their English learning plan and time (item 37, 38.8%), that they knew the requirement for the English syllabus (item 38, 39.3%) and that they had a clear plan for learning English apart from the assignments given by teachers (item 34, 36.8%).

Mean scores for 'selecting and implementing learning strategies' (AEL 3) varied from 3.0 to 3.5. A relatively large proportion of students (62.7%) indicated that they had the

ability to use effective reading strategies (item 41, M=3.5), while more than half (54.8%) agreed that they could adopt appropriate writing strategies in writing exercises (item 42, M=3.4). Much smaller proportions (33.4% and 32.9% respectively) agreed that they could use appropriate listening and communication strategies (items 39 and 40, both with a mean of 3.0), while just 35.4% agreed with item 43 (M=3.2) that they had a relatively thorough understanding of the selection and use of strategies for reading, writing, listening and speaking in English.

TABLE 5

Percentages and Mean Scores for Items on Learner Autonomy Components

Autonomy Components	Items	Percent					Mean	SD
		1 (Strongly disagree)	2	3	4	5 (Strongly agree)		
Identifying teachers' goals	31. I can understand teachers' teaching purposes for carrying out teaching activities.	3.0	9.0	34.8	48.3	5.0	3.4	0.84
	32. I can convert teachers' teaching purposes into my own learning goals.	1.5	20.4	39.8	34.3	4.0	3.2	0 .86
	33. I can keep up with the teaching pace in English class.	1.5	18.9	20.4	53.2	6.0	3.4	0.92
Setting appropriate objectives and plans	34. I have a clear plan for my English learning besides the assignment.	1.5	30.8	30.8	33.8	3.0	3.1	0.91
	35. I can set English learning goals according to my own English learning situation.	3.5	19.9	33.3	37.3	6.0	3.2	0.95
	36. I have clear requirements for the improvement of my English.	1.5	20.9	37.8	32.3	7.5	3.2	0.92
	37. I can properly arrange my English plans and learning time.	2.0	28.9	30.3	34.8	4.0	3.1	0.93
	38. I know the requirement for listening, speaking, reading, writing and translating in *The Syllabus for College English Teaching*.	4.5	20.9	35.3	34.8	4.5	3.1	0.95
Selecting and implementing learning strategies	39. In listening comprehension, I can use effective learning strategies consciously like prediction.	1.5	32.8	32.3	27.9	5.5	3.0	0.94
	40. In speaking practice, I can use effective communication strategies consciously, like body language, synonym-replacing.	1.0	35.3	30.8	25.9	7.0	3.0	0 .97
	41. In reading comprehension, I can use effective reading strategies consciously like guessing meaning in context.	0	15.4	21.9	56.7	6.0	3.5	0.83
	42. In writing exercise, I can use effective writing strategies consciously like cohesion and coherence.	3.5	13.4	28.4	46.8	8.0	3.4	0 .94
	43. I have a relatively thorough understanding of the selection and use of the learning strategies mentioned above.	2.0	20.4	42.3	28.4	7.0	3.2	0.90
Monitoring the strategies used	44. I can consciously monitor my use of communication strategies in speaking.	6.0	25.4	39.8	23.9	5.0	3.0	0.97
	45. I can consciously monitor my use of writing strategies in writing exercise.	2.5	20.4	40.8	31.8	4.5	3.2	0.88
	46. I can consciously monitor my use of reading strategies in reading comprehension.	2.0	18.9	33.3	41.3	4.5	3.3	0.89
	47. I can consciously monitor my use of listening strategies in listening comprehension.	6.5	22.4	39.8	26.9	4.5	3.0	0.97
	48. I often evaluate my learning method to find possible problems and solutions.	3.0	26.4	26.9	37.8	6.0	3.2	0.99
	49. I am able to judge whether my learning method is practical.	2.5	17.9	29.4	42.3	8.0	3.4	0.95
	50. I can use another appropriate learning method if I find my learning method is not useful.	3.0	16.4	32.8	38.3	9.5	3.4	0.96

TABLE 5 (contd)

Autonomy Components	Items	1 (Strongly disagree)	2	3	4	5 (Strongly agree)	Mean	SD
				Percent				
Evaluating the learning process	51. I actively seek opportunities to practice my English either in class or out of class, like role-play, English corner, etc.	2.5	41.3	29.9	21.9	4.5	2.9	0.94
	52. I can overcome emotional factors that hinder my English learning like anxiety or depression.	1.0	29.4	31.3	29.9	8.5	3.2	0.98
	53. I can often identify my language errors in English.	.5	23.9	33.3	33.8	8.5	3.3	0.93
	54. I can make full use of learning resources (library, internet) to improve my English.	1.0	19.4	21.4	48.8	9.5	3.5	0.94
	55. I can often consciously put newly learned knowledge into practice.	3.0	29.4	30.8	31.8	5.0	3.1	0.97
	56. I often actively participate in cooperative learning (finding a speaking partner, group discussion).	1.0	40.8	30.3	22.4	5.5	2.9	0.94
	57. I can find out the reasons for language errors and can take effective measures to correct them, like misuse of grammar.	3.5	34.3	37.8	20.9	3.5	2.9	0.90
	58. When completing a certain language task, I can often plan the progress of task completion.	3.0	26.9	34.3	31.3	4.5	3.1	0.94
	59. When completing a certain language task, I can often check and update my comprehension of the obtained knowledge.	3.0	25.4	31.8	35.8	4.0	3.1	0.94
	60. To make myself a more successful language learner, I can choose effective learning approaches, like experience sharing, listening to the radio, reading.	1.0	28.9	22.9	41.3	6.0	3.2	0.97

1=strongly disagree; 2=disagree; 3=not sure; 4=agree; 5=strongly agree

In relation to 'monitoring the strategies used' (AEL 4), about half of the students (50.3% and 47.8% respectively) indicated that they could judge whether their method of learning was practical (item 49, M=3.4) and could use another method if required (item 50, M=3.4). A somewhat smaller proportion (43.8%) agreed that they often evaluated their learning method to find possible problems and solutions (item 48, M=3.3). Of the four language skills identified in the questionnaire (listening, speaking, reading and writing), reading was more often identified as the one that students were able to monitor. While 45.8% agreed that they could monitor their reading comprehension (item 46, M=3.3), less than one-third (31.4%) agreed that they could monitor their listening strategies (item 47, M=3.2) or their speech communication strategies (item 44, M=3.0). Slightly more students were confident about monitoring writing skills with 36.3% agreeing that they were able to do this in their writing exercises (item 45, M=3.2).

Of items relating to 'evaluating the learning process' (AEL 5), item 54 had the highest mean of 3.5, with 58.3% of students agreeing that they made full use of learning resources (library, internet) to improve their learning. Smaller but sizeable proportions (47.3%, 42.3%, and 39.8% respectively) indicated that they could choose effective learning approaches, such as listening to the radio (item 60, M=3.2), often identify their language errors (item 53, M=3.3) or often check and update their understanding of obtained knowledge (item 59, M=3.1). However, less than one-quarter (24.4%) reported that they could find out the reason for their errors and take effective action to correct them (item 57, M=2.9). Fewer than four in ten (38.4%) students agreed that they could overcome emotional factors, such as anxiety or depression, that might hinder their learning (item 52, M=3.2), that they could often apply newly acquired knowledge (item 55, 36.8%, M=3.1), or often plan the progress of task completion (item 58, 35.8%, M=3.1). Students tended to report not engaging in social activities to improve their English, as indicated by the relatively low mean score of 2.9 for items 51 and 56. The response distributions for these items show that only 27.9% of students agreed that they often participated in cooperative learning (finding a speaking partner, group discussion) while a similar proportion (26.4%) agreed that they actively sought opportunities to practise their English, in class or out of class.

Correlation Between Learning Motivation and Learner Autonomy

Table 6 shows a significant positive correlation between learner autonomy and learning motivation (r=.51; p<.01). According to Cohen (1988), a correlation of this size can be considered 'large'. Correlations between dimensions of motivation and overall autonomy are mostly in the moderate to strong range (between 0.4 and 0.6). That is, the stronger the motivation, the greater the autonomy regarding English language learning.

Learner autonomy was found to significantly positively correlate with each component

of learning motivation, as shown in Table 7, at the .01 level of probability with the exceptions of 'immediate achievement' (*r*=-.10) and 'learning situation' (*r*=-.09). Compared with other dimensions of learning motivation, 'intrinsic interest' was found to be more highly correlated with learner autonomy (*r*=.58). The correlations between learner autonomy and two further components of learning motivation, 'individual development' (*r* =.41) and 'social responsibility' (*r*=.40), can also be described as relatively large. In addition to these, motivation relating to 'information media' was found to have a significant positive correlation with learner autonomy. This correlation size is in the medium to large range (*r*=.39), similar to that found for the relationship between motivation relating to 'going abroad' and learner autonomy (*r* =.36).

TABLE 6

Pearson Correlation Coefficients between Learning Motivations and Learner Autonomy

Motivation Components	Correlation Coefficient (*r*)	Sig. (2-tailed)	Relationship
Intrinsic interest (MII)	.58*	<.01	Direct/Positive
Immediate achievement (MIA)	-.10	.17	Inverse/Negative
Learning situation (MLS)	-.09	.22	Inverse/Negative
Going abroad (MGA)	.36*	<.01	Direct/Positive
Social responsibility (MSR)	.40*	<.01	Direct/Positive
Individual development (MID)	.41*	<.01	Direct/Positive
Information media (MIM)	.39*	<.01	Direct/Positive
Overall	.52*	<.01	Direct/Positive

*. Correlation is significant at the 0.01 level (2-tailed)

The Relative Contributions of Learning Motivation to Learner Autonomy

The previous analysis addressed the question of whether a correlation existed between learner autonomy and various components of motivation. To identify the relative contribution of each of these components to learner autonomy, multiple linear regression analysis was employed in which learner autonomy was assumed to be the dependent variable and the seven components of learning motivation were deemed to be independent variables. All independent variables were entered using the method of regression in which all variables were entered in a single step. Based on the results of this analysis, three motivation components remained in the final regression model: 'intrinsic interest', 'social responsibility', and 'individual development' (Table 7).

TABLE 7

Regression Analysis of the Effect of Learning Motivation on Learner Autonomy

Independent Variable	R	R square	F	B	T	Sig.
	.687	.472	28.867			
(Constant)				.77	3.10	.002
Intrinsic interest (MII)				.43	8.33	<.001
Social responsibility (MSR)				.23	4.09	<.001
Individual development (MID)				.17	2.40	.015

An R-square value of .47 indicates that the three independent variables, 'intrinsic interest', 'social responsibility' and 'individual development', together account for 47% of the variance in learner autonomy. 'Intrinsic interest', with a beta value of .43, was found to have the strongest explanatory power. 'Social responsibility' had the second highest association, followed by 'individual development', with beta values of .23 and .17 respectively.

Implications for English Language Teaching and Learning Motivation for Learning English

The Chinese undergraduate students who took part in this study showed medium levels of motivation in relation to the learning of English. According to the data, the strongest motivations were found to be 'individual development', 'social responsibility' and 'immediate achievement', all of which relate to instrumental or extrinsic motivations as described in Gardner and Lambert's (1972) social-psychological model and Deci and Ryan's (1985) classification.

'Individual development' was found to be the strongest aspect of motivation, indicating that students were motivated to learn English by their desire for personal accomplishment in examinations, employment and in the wider society. The same sorts of motivations were reflected in their desire for 'immediate achievement'. Students were also relatively well motivated to learn English by a sense of 'social responsibility', particularly to their parents and their school, a finding that is consistent with the significant role of parental influence and expectations in Chinese families and culture; passing examinations and obtaining good results are considered important means of gaining honour and prestige.

The weakest aspect of English language learning motivation examined in the study relates to 'going abroad'. Undergraduates tended not to have plans to emigrate from China though some expressed interest in work and study opportunities abroad and in the cultures of English-speaking countries. A clear preference to stay home may have

been influenced by promising career prospects in the domestic market encompassed by the rapid economic and technological development of the past two decades.

Results also revealed that undergraduate students had relatively little intrinsic interest in learning English. They were not greatly motivated to learn the language for its own sake, or for its history, culture or literature, though they showed more interest in English songs and movies. Since English is a compulsory subject for students in China, it is suggested that teachers might focus on those aspects of motivation that emerged as contributing most to students' overall motivation to learn English such as 'individual development', 'immediate achievement', and 'social responsibility'. Equally though, the results of this study point to the need to also remind educators not to neglect intrinsic or integrative motivation when supporting English language students.

Learner Autonomy

Another key finding of this study is that undergraduates did not have high levels of overall learner autonomy in relation to English language learning. This may be linked to traditional ways of teaching English in China. That is, English teaching and learning are largely teacher-led and focused on passing examinations. Students generally have little autonomy in deciding what to learn.

Little variation was found across Xu's (2004) five elements of learner autonomy, based on cognitive psychology, humanism and constructivism, that also informed the design of this study: 1) to know the teachers' teaching aims and requirements; 2) to establish learning objectives and develop a learning plan; 3) to implement learning strategies efficiently; 4) to monitor the implementation of learning strategies; and 5) to monitor and evaluate the learning process. Students had similar response patterns across each of these elements.

There is some evidence that undergraduate students think they are better able to implement and monitor learning strategies for reading and writing than for listening and speaking. Not unrelated, perhaps, is the finding that although undergraduates reported making use of learning resources to improve their English language skills, they did not actively create opportunities to practice speaking the language. This may reflect the monolingual society in China, where Putonghua is the main language spoken by all Chinese, with few convenient opportunities to use English on a regular basis. It is therefore suggested that teachers encourage their students to create chances to practice speaking and listening to English and to engage in discussion outside of coursework through a variety of strategies including the use of cinema and online resources (e.g., videos with subtitles).

Correlation Between Motivation and Learner Autonomy

This study found a significant relationship between overall learning motivation and learner autonomy. Learning motivation was found to be moderately strongly associated with English language learner autonomy, which is in accordance with previous research findings (Dickinson, 1995).

Of the seven components of motivation, 'intrinsic interest' was found to be the most highly correlated with learner autonomy. The finding suggests that a stronger focus on this aspect of motivation could boost English language learning and enhance learner autonomy, consistent with Deci and Ryan's (1985) conclusion that intrinsic interest leads to more successful and efficient learning. According to Ushioda (1996), intrinsic motivation has a large number of positive characteristics, one of which is the expression of personal control and autonomy in relation to learning. In this study, however, the mean score for 'intrinsic interest' motivation is relatively low. Therefore, to foster students' autonomous learning, it is essential to stimulate this aspect of motivation. As the Chinese proverb states, "interest is the best teacher".

The second highest correlation was found to be between the 'individual development' aspect of motivation and learner autonomy. Due to the rapid expansion of student enrolment across universities in China, it is not uncommon for undergraduate students to be unemployed immediately after graduation. As a result, investment in personal goals that contribute to 'individual development' has become more important and a good command of English is regarded as beneficial to career progression.

'Social responsibility' also had a positive significant correlation with learner autonomy, indicating that the stronger the undergraduates' commitment to societal values such as family obligations and patriotism, the greater their learner autonomy. Particularly under the one-child policy in China, parents tended to take control and care of every aspect of their child's life and children became accustomed to doing what they were told. As Qi (2004) explains, "in the traditional Chinese family, a majority of parents tend to overprotect, even spoil their children" (pp. 39-41). Meeting the expectations of their parents (including the learning of English) emerged as an important goal of children. In this scenario, it is not unreasonable to assume that few students learned English purely out of intrinsic interest.

In this study, learner autonomy was not much influenced by the nature of the learning situation such as the characteristics of teachers or the kinds of teaching materials available. Neither was there any strong relationship between the desire to use English as a means to access information media and learner autonomy. The fact that 'immediate achievement', considered as instrumental achievement, was found to be negatively correlated with learner autonomy, though contrary to previous research reported by Liu (2012), may indicate positively, it can be argued, that learner autonomy was not associated with short-term goals for the undergraduate students in this study.

Conclusion

The present study found a positive relationship between overall motivation to learn English and learner autonomy. Results showed that undergraduate students in China possessed medium levels of motivation to learn English and that the motivation was in principle instrumental or extrinsic. However, learner autonomy was not strong. Given these findings, it is suggested that teachers focus on those aspects of motivation that relate to 'intrinsic interest', 'individual development' and 'social responsibility' when trying to promote learner autonomy among Chinese English language undergraduate students. In addition, however, since only 47% of the variance in learner autonomy could be explained by these three variables, it is also suggested that future studies consider other variables or factors, including demographic ones such as gender and socio-economic status, that might affect learner autonomy such as students' emotions and learning styles.

References

Aizawa, K. (2017). Cognition and behavior. *Synthese,* 194, 4269–4288. https://doi.org/10.1007/s11229-014-0645-5

Boggu, A. T., & Sundarsingh, J. (2019). An experiential learning approach to fostering learner autonomy among Omani students. *Journal of Language Teaching and Research*, *10*(1), 204-214.

Chan, V. (2001). Readiness for learner autonomy: What do our learners tell us? *Teaching in Higher Education*, 6(4), 505-518. https://doi org/10.1080/13562510120078045

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.

Dickinson, L. (1995). Autonomy and motivation: A literature review. *System*, *23*(2), 165-174. https://doi.org/10.1016/0346-251X(95)00005-5

Gao, Y. H. (2002). The correlation between Chinese undergraduates' English learning motivation and the change of self-identity. *Foreign Language Teaching*, *4*, 18-24.

Gao, Y., Zhao, Y., Cheng, Y., & Zhou, Y. (2003). Motivation types of Chinese college undergraduates. *Modern Foreign Languages*, *1*, 28-38.

Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology/Revue Canadienne de Psychologie, 13*(4), 266–272. https://doi.org/10.1037/h0083787

Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Newbury House.

Kabiri, M., Nosratinia, M. & Mansouri, M. (2018). The relationship between EFL learners' autonomy, anxiety, and their motivated strategies for learning. *Journal of Applied Linguistics and Language Research, 5*(1), 253-268.

Li, Q. (2014). Differences in the motivation of Chinese learners of English in a foreign and second language context. *System*, (2014*, February)*, 451-461. https://doi.org/10.1016/j.system.2014.01.011

Littlewood, W. (1999). Defining and developing autonomy in east Asian contexts. *Applied Linguistics*, *20*(1), 71-94. https://doi.org/10.1093/applin/20.1.71

Liu, H. J. (2012). Understanding EFL undergraduate anxiety in relation to motivation, autonomy, and language proficiency. *Electronic Journal of Foreign Language Teaching*, *9*(1), 123-139.

Pang, W. G. (2001). On students' self-study. *Journal of East China Normal University (Educational Science Edition). 72*(2), 78-83.

Qi, H. B. (2004). An analysis of the awareness of Chinese EFL learner autonomy. *Foreign Language Teaching and Learning*, *3*, 90-93.

Shi, Y. Z. (2000). A report on a survey of college English learners' motivation. *Foreign Language Teaching*, *4*, 8-11.

Stevik, H. H. (1990). *Humanism in language teaching: A critical perspective.* Oxford University Press.

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education, 48,* 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Ushioda, E. (1996). *Learner autonomy 5: The role of motivation*. Authentik Language Learning Resources Ltd.

Wen-Cheng, H., Xia, L., & Xu, X. (2019). An investigation of responsibility and learner autonomy in a Sino-British EAP Program in China. *Journal of Asia TEFL*, *16*(1), 220-234. http://dx.doi.org/10.18823/asiatefl.2019.16.1.14.220

Xu, Y. L. (2004). A survey and analysis of non-English major undergraduates' autonomous English learning competence. *Foreign Language Teaching and Research*, *1,* 64-68.