

## THE STABILITY OF TEACHERS' PERCEPTIONS OF PUPIL CHARACTERISTICS\*

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Eleven second grade and 18 fifth grade teachers were asked to rate their pupils (369 at second grade 591 at fifth grade) on 12 personal characteristics in the first term of the school year and again in the final term. Factor analyses of the four ratings yielded two factors a classroom behaviour factor and a social behaviour factor. In all the analyses the two factors accounted for over 70 per cent of total variance. The factor structures in the four analyses were highly similar. There was however some evidence that teachers rating standards varied with grade.

While the primary concern of teachers in the classroom may be the scholastic attainment of pupils, there can be little doubt that much of a teacher's energy and time is devoted to the observation and control of other aspects of pupils' behaviour (12). Indeed, in some educational systems, teachers are required to rate personal and social characteristics of pupils as well as scholastic ones and ratings may become part of the pupil's permanent school record (3). At the very least, a teacher must be concerned with establishing preconditions of learning, such as classroom order and control, which relate to personal and social factors, if he is to be successful in achieving his instructional aims (16). For these reasons we would expect teachers to be sensitive to a range of characteristics of pupils other than cognitive ones. Perhaps with such considerations as these in mind, Parsons (14) has described school achievement in terms of two basic components, which, however, he did not clearly define. One he broadly described as 'cognitive', this is concerned with the acquisition of information, writing, mathematical and thinking skills. The second he described as 'moral', it embraces such factors as respect for the teacher,

\* This study was supported by funds from the Carnegie Corporation of New York the National Institute of Education (Washington) the Russell Sage Foundation the Spencer Foundation and the Department of Education of the Irish government

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consideration and co-operativeness, good 'working habits', leadership and initiative, traits more popularly regarded as personality ones rather than moral ones

While Parsons supposed that these two components are not clearly differentiated from each other in the elementary grades at school, empirical investigations of teachers' perceptions of pupils, most of which have employed factor analytic techniques, present evidence that teachers do discriminate a variety of characteristics in their pupils. The number of dimensions which best describe teachers' perceptions of pupils varies with the characteristics the teachers were asked to rate in the first place as well as with the method of analysis employed in data reduction. However, there is considerable consistency in the identification of both cognitive and non-cognitive components in the behaviour of pupils (12, 13). Further, it has been shown in several studies that non-cognitive behaviour can be differentiated into more than one component (7, 8, 19), this is so even in the case of preschool children (11).

The present investigation is concerned with teachers' perceptions of primary school pupils' characteristics that may loosely be described as noncognitive or, in Parson's terminology, 'moral'. Firstly, we will examine the dimensions underlying a variety of rating categories. Secondly, we will determine if the dimensions used by teachers are similar over a period of time (from early in the school year to late in the school year). Thirdly, we will examine ratings at two different grade levels (standards 2 and 5) to determine if the dimensions used by teachers at these different levels are similar.

#### METHOD

##### *Sample*

Samples of 11 second standard teachers and 18 fifth standard teachers were selected from a national sample of Irish teachers participating in a larger study (1, 10). The selected teachers rated 369 and 591 pupils respectively.

##### *Procedure*

In the first term of the school year (November December) and again in the final term (May June), the teachers were asked to rate each of their pupils on 12 personal characteristics: participation in class, behaviour in

school (personal appearance and dress, attention span/concentration, persistence in school work, keenness to get on, speech/use of language, neatness in school work, manners/politeness, getting along with other children, working with limited supervision and attendance). Each characteristic was rated for each student on a five point scale ranging from very good to poor. Responses were coded 5 for a rating of 'very good', 4 for 'good', 3 for 'average', 2 for 'fair' and 1 for 'poor'.

#### *Analysis*

A common factor analysis with varimax rotation (15) was performed separately on the ratings at each grade level and for each time of rating.

#### RESULTS

The results of the four factor analyses based on two ratings (first term and last term of the school year) in standards two and five are presented in Tables 1 and 2 respectively. In each analysis, two factors with eigen values greater than 1.0 were identified.

It will be noted that each characteristic loads highly on one factor in a similar fashion across samples (with the exception of attendance in the first rating in standard 2, where loadings are about equal on both factors).

Characteristics which load highly on the first factor are participation in class (e.g., raising hand, asking questions), attention span/concentration, persistence in school work, keenness to get on, speech/use of language, neatness in school work and working with limited supervision. This factor we name the classroom behaviour factor, since characteristics more directly associated with a pupil's scholastic work load highly on it. The characteristics which load highly on the second factor are behaviour in school, personal appearance and dress, manners/politeness, getting along with other children and attendance. With the possible exception of attendance, these characteristics relate to social aspects of behaviour and so the factor may be described as a social one.

The four separate factor structures were examined to determine their similarity (15). The coefficients of congruence for each factor structure, which are presented in Tables 3 and 4, clearly show a similarity, both within and across grades.

TABLE 1  
FACTOR LOADINGS OF TEACHERS RATINGS OF TWELVE PUPIL CHARACTERISTICS  
FOR STANDARD 2 BY TIME OF RATING

Characteristics	1st rating			2nd rating		
	Classroom Behaviour	Social Behaviour	Commun ality	Classroom Behaviour	Social Behaviour	Commun ality
1 Participation in class	84	35	83	78	40	77
2 Behaviour in school	43	73	73	42	77	76
3 Personal appearance and dress	36	69	61	36	76	70
4 Attention span/concentration	86	41	90	87	40	92
5 Persistence in school work	86	42	92	87	43	94
6 Keenness to get on	86	42	92	83	43	88
7 Speech/use of language	79	41	79	78	39	76
8 Neatness in school work	73	50	78	64	53	69
9 Manners/politeness	31	87	85	33	88	87
10 Getting along with other children	37	78	75	44	72	71
11 Working with limited supervision	83	37	82	80	36	76
12 Attendance	37	40	30	35	55	42
Percent of variance accounted for in total factor space	45.5	31.1	76.6	43.2	33.3	76.5

TABLE 2  
FACTOR LOADINGS OF TEACHERS RATINGS OF TWELVE PUPIL CHARACTERISTICS  
FOR STANDARD 5 BY TIME OF RATING

Characteristics	1st rating			2nd rating		
	Classroom Behaviour	Social Behaviour	Community	Classroom Behaviour	Social Behaviour	Community
1 Participation in class	83	23	73	79	28	71
2 Behaviour in school	31	80	72	32	85	82
3 Personal appearance and dress	35	64	53	40	65	58
4 Attention span/concentration	87	36	88	86	35	87
5 Persistence in school work	88	36	90	87	36	89
6 Keenness to get on	86	37	88	83	41	86
7 Speech/use of language	78	31	71	80	25	70
8 Neatness in school work	73	42	71	71	39	66
9 Manners/politeness	25	92	91	26	90	88
10 Getting along with other children	35	66	56	37	66	57
11 Working with limited supervision	74	43	74	75	38	71
12 Attendance	26	57	39	23	55	36
Percent of variance accounted for in total factor space	42.6	29.6	72.2	41.9	29.6	71.6

TABLE 3

COEFFICIENTS OF CONGRUENCE BETWEEN FACTOR SOLUTIONS  
 AT STANDARDS 2 AND 5 ON TWO OCCASIONS  
 CLASSROOM BEHAVIOUR FACTOR

	1	2	3	4
1 Standard 2 1st rating				
2 Standard 2 2nd rating	999			
3 Standard 5 1st rating	997	996		
4 Standard 5 2nd rating	997	997	999	

TABLE 4

COEFFICIENTS OF CONGRUENCE BETWEEN FACTOR SOLUTIONS  
 AT STANDARDS 2 AND 5 ON TWO OCCASIONS  
 SOCIAL BEHAVIOUR FACTOR

	1	2	3	4
1 Standard 2 1st rating				
2 Standard 2 2nd rating	997			
3 Standard 5 1st rating	961	991		
4 Standard 5 2nd rating	988	991	999	

Table 5 provides an alternative way of viewing the component characteristics of the factors. In it, the means and standard deviations of each characteristic are arranged by grade level and time of rating. It is apparent from the table that teachers tended to rate their pupils towards the higher end of the scale (above 3.0) for all characteristics. The tendency is greater in the case of social characteristics, for which means are invariably higher than for classroom behaviour characteristics. However, with a few exceptions, the variances associated with the latter are greater than those associated with the former.

TABLE 5

MEANS AND STANDARD DEVIATIONS FOR TEACHERS RATINGS OF 12 PUPIL CHARACTERISTICS  
BY STANDARD AND TIME OF RATING

CHARACTERISTICS	Standard 2 (1st rating)		Standard 2 (2nd rating)		Standard 5 (1st rating)		Standard 5 (2nd rating)	
	M	SD	M	SD	M	SD	M	SD
<i>Classroom behaviour factor</i>								
Participation in class	3.46	1.23	3.60	1.28	3.26	1.19	3.37	1.19
Attention span/concentration	3.33	1.30	3.53	1.24	3.24	1.14	3.36	1.16
Persistence in school work	3.44	1.27	3.50	1.29	3.22	1.16	3.38	1.17
Keenness to get on	3.52	1.22	3.54	1.27	3.28	1.15	3.46	1.16
Speech/use of language	3.52	1.16	3.53	1.19	3.31	1.05	3.34	1.09
Neatness in school work	3.59	1.16	3.57	1.21	3.29	1.19	3.36	1.17
Working with limited supervision	3.40	1.24	3.41	1.23	3.14	1.14	3.26	1.19
<i>Social behaviour factor</i>								
Behaviour in school	3.89	1.00	4.00	1.06	3.96	1.06	4.02	1.08
Personal appearance and dress	4.11	0.90	4.15	0.97	3.96	0.98	4.04	1.03
Manners/politeness	4.07	0.90	4.14	0.97	3.98	1.01	4.08	1.07
Getting along with other children	3.95	0.89	4.03	0.95	3.76	1.01	3.82	1.03
Attendance	4.23	0.99	4.34	0.94	4.20	1.08	4.14	1.12

There is also a fairly consistent tendency for mean second rating within a standard to be higher than the mean first rating, as well as for variance to increase slightly on the second rating. The situation is somewhat different when one looks across standards. There is a strong tendency for the mean rating at the higher standard to be lower than at the lower standard. The situation with regard to variance is more complex. In general, for class room behaviour characteristics, variance in ratings decreases, while for social characteristics, variance increases. It will be recalled that the initial ratings for social characteristics exhibited less variance than the initial ratings for classroom behaviour characteristics. The variance for social characteristics at standard 5 is still not as large as the variance for classroom behaviour characteristics at either standard.

#### DISCUSSION

The first finding that emerges from our analyses is that teachers tend to perceive a variety of pupil characteristics as lying along a limited number of dimensions. More precisely, teachers appear to distinguish two basic dimensions among the 'moral' or personal characteristics of pupils. One dimension covers characteristics which are fairly directly related to scholastic work of the classroom (classroom behaviour factor), while the other refers to social characteristics (social behaviour factor). Across the four analyses which we carried out (two for second standard ratings and two for fifth standard ratings), the two factors accounted for between 71.6 and 76.6 per cent of the total variance of variables, they thus provide a good indication of the dimensionality of the data. The amount of variance accounted for by the individual factors is fairly consistent across analyses. The first factor accounts for between 42 and 45 per cent of total variance, while the second accounts for between 29 and 33 per cent. Thus, the factors are fairly evenly balanced in the amounts of variance for which they account.

These findings are similar in a number of respects to those of previous studies of teachers' perceptions of pupils' characteristics. In general, they support the view that teachers perceive a 'moral' dimension in pupils' behaviour. However, this does not seem to be a unitary trait. The precise number of dimensions which can be identified, as we indicated above, is no doubt a function of the characteristics which teachers are asked to rate. Our findings probably come closest to those of Willis (19) who, in a study of teachers' perceptions in the United States, identified two factors which were very similar to ours.

A second finding of our analyses is that the two dimensions which teachers use to categorize pupils remain stable over time. That is, ratings of the same pupils by the same teachers on two different occasions (in the first term and in the last term of the school year) reveal similar factor structures. It is interesting to note that teachers feel in a position to apply the categories in rating pupils' personality characteristics relatively early in the school year. As is the case with more obviously cognitive characteristics (2), it seems that teachers are quick to form impressions of pupils.

A third finding that emerges from our analyses is that teachers at different grade levels employ the same dimensions in rating their pupils. This suggests that, from standard 2 to standard 5 in the primary school at any rate, teachers employ similar criteria in rating pupils. More direct observations of pupil behaviour would be required before one could say whether this is a function solely of teachers' perceptions or whether, in fact, pupils exhibit similar patterns of behaviour over the time period in question.

There is some evidence from our data that teachers' perceptions do shift somewhat between the second and fifth standard. The shift does not refer to the dimensions which underlie teacher ratings but rather to the 'severity' and variance of the ratings. Mean ratings for each of the separate pupil characteristics tend to be lower for older pupils than for younger ones. One might have expected that pupils as they grow older would tend to become more socialized into the requirements of the classroom and that this tendency would be reflected in teachers' ratings. Certainly, it is surprising to find teachers rating fifth standard pupils as lower, however marginally, than second standard pupils on such traits as attention span, persistence in school work, speech and the use of language, neatness in school work and the ability to work with limited supervision. It may be that teachers' expectations for pupils in grade 5 are higher than those for pupils in grade 2 and that their ratings reflect these differences in expectation. If this is so, it could imply some difference in the 'mental scales' which teachers employ in rating pupils at different grade levels, despite the similarity of the dimensions underlying the ratings.

Further evidence of difference in rating scales used by teachers in lower and higher grades is to be found in differences in the variance of ratings that are associated with grade. In general, teachers see older children as less variable in characteristics relating to classroom behaviour (participation in class, attention span, ability to work with limited supervision, etc.), evidence perhaps of socialization in the culture of the school. At the

same time, greater variance is perceived in social behaviour (personal appearance, manners/politeness, getting along with other children), a not unexpected finding.

In conclusion, our study, in common with a number of others, indicates that teachers perceive their pupils in terms of a limited number of fairly clear-cut dimensions. Further, these dimensions are relatively stable over time. When teachers are provided with a variety of personal characteristics on which to rate pupils, they employ dimensions or scales, under each of which is subsumed a variety of characteristics. This can hardly be regarded as surprising given man's tendency to categorize conceptual data in the interest of economic storage.

Our findings do, however, raise a number of issues. Firstly, it would be of interest to relate teachers' perceptions of pupils to data on pupil characteristics and behaviour derived in alternative ways. For example, to what extent would pupils' self-perceptions or observations of their behaviour exhibit patterns similar to those derived from teachers' perceptions? Do the dimensions used by teachers do justice to the variety of characteristics exhibited by pupils? Finally, we might expect teachers' categorizations of pupils as identified in our study to be related to the teachers' interactions with their pupils (4, 5, 6, 9, 17, 18). If this is so, then we might further expect such interactions to be related to pupils' scholastic performance and possibly their general development. Our data obviously do not speak to this issue. Its further exploration should go some way towards elucidating the role and importance of teachers' perceptions in the learning-teaching process.

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