

Teacher perceptions of student characteristics: “halo effects” between behavioural and social perceptions, and expectations for academic achievement



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Introduction

Research on teacher perceptions has usually focused on judgments of student achievement. However, teacher perceptions do not only relate to the children's purely academic characteristics. Conceptions also have to do with students' social and emotional characteristics. Those conceptions are not necessarily explicit, but can presumably influence teachers' judgments of students' academic abilities and achievement in a significant way, and by this means affect their expectations and assessment of students (Bennett & al., 1993).

Although the question of the effects of teacher academic expectations on student achievement is rather controversial (e.g. Madon, Jussim & Eccles, 1997), implications of such perceptions (referring to students' social, emotional and/or cognitive/academic characteristics) for student assessment can hardly be questioned. In the following research, we intend to highlight and analyse “contamination” effects between those different spheres of teacher perception in particular through the analysis of the link between academic expectations and teacher perception of children's social (popularity), psychological (maturity and motivation) and behavioural (aggression and disruptive behaviours) characteristics.

Method

More than 4000 2nd and 3rd grade primary school pupils participating in a national longitudinal study of grade retention (founded by the Swiss national science foundation, see Bless, Bonvin & Schuepbach, 2005) were selected for the present study.

Teacher evaluations of student characteristics were obtained through ad hoc scales (from the *Teacher-Student-Questionnaire*: Bonvin, 2003) for the following variables: intellectual potential, social acceptance, maturity, motivation, aggression, disruptive behaviours, and direct expectations for student achievement on both a mathematics and language test. On the student level, academic performance was measured with the above mentioned tests (on the basis of 2nd and 3rd grade curricula; for details, see Bless, Bonvin & Schuepbach, 2005). On the side of the child, measures further involved a sociometric analysis based on Krueger's approach (Krueger, 1976) and an IQ measure (*CFT-1*; Cattell, Weiss & Osterland, 1997). Design is transversal, and results are yielded from correlational analysis, and a regression model of effects is presented. Analyses were replicated over two measurement times of the above mentioned study, at the end of second and third grade.

Results

Mean correlations between teacher expectations and actual achievement in maths and language tests (Table 1) are in accordance with what has usually been found in past research (e.g. Hoge & Coladarci, 1989: median $r=.66$) and with the fact that most research shows teacher's judgments of student achievement to be – on average – **accurate**. Correlations between teacher evaluations of the child's intellectual potential, social acceptance (popularity) in the classroom and the objective data gathered at the child's level are lower, which isn't surprising.

However, the low correlation found between intellectual potential as evaluated by the teachers and the child's IQ score suggests that such an assessment has more to do with a global appraisal of students' academic abilities than with a concept of intelligence independent from the school context. On the other hand, the mean correlation between actual achievement in the mathematics and language tests equals .58, whereas the corresponding correlation between teacher expectations in maths and language equals .72. Both results suggest that teacher direct expectations of student achievement are global in nature rather than specific to a given academic subject or achievement test.

Table 1. – Mean correlations between teacher expectations and actual results

		Teacher expectation and perceptions			
		Mathematics	Language	Intellectual potential	Popularity
Actual results	Mathematics	.62	.49	.44	.20
	Language	.53	.63	.47	.22
	IQ	.35	.33	.38	.14
	Social acceptance	.14	.15	.20	.37

Regression models at t_1 and t_2 reveal comparable results (Tables 2 and 3 thus only present results for t_1). Hierarchical regressions were carried out. In the first step, the pupils' actual achievement scores are entered as predictors of teacher expectations. In the second, teacher behavioural, social and emotional assessments of the child are added alongside actual achievement.

The analysis is repeated for each achievement test separately (mathematics and language). Significant results only are displayed in Tables 2 and 3: whereas an important proportion (40%) of the variance in teacher expectations is, as hypothesized, explained by the child's **actual achievement**, a significant percentage of variance can be attributed to the teacher's assessments of students' **motivation/interest** and **maturity** (between 8 and 10%). Behavioural variables (aggression and disruptive behaviours) did not provide a significant increase in the regression models' explained variance.

Table 2. – Prediction of teacher expectation for the mathematics

		Beta	df	R ²
Step 1	Mathematics	.50**	3846	.39
Step 2	Motivation/Interest	.20**	3844	.08
	Maturity	.15**		

* $p < 5\%$ / ** $p < 1\%$

Table 3. – Prediction of teacher expectation for the language

		Beta	df	R ²
Step 1	Language	.48**	3870	.40
Step 2	Motivation/Interest	.23**	3868	.10
	Maturity	.18**		

* $p < 5\%$ / ** $p < 1\%$

It is worth noting that if only the most inaccurate teachers are selected for analysis, the variance in expectations explained by the child's perceived motivation and maturity will rise to 15% in maths and 21% in language. For the most accurate teachers, 95 to 97% of the variance is explained by the child's actual achievement.

Conclusions

Results show the overall accuracy of teacher perceptions of student characteristics when direct expectations are measured (here, in the case of academic achievement). Main results reveal a significant relationship between teachers' perceptions of students' maturity and motivation/interest and their expectations for academic achievement. No significant results were found concerning purely “behavioural” variables (aggression and disruptive behaviours): this confirms some earlier research indicating that the effects of the child's behavioural difficulties on it's academic achievement does not seem to be mediated by teacher expectations (e.g. Hecht & Greenfield, 2002).

The characteristics related to teacher expectations in our study coincide with descriptions by Alvidrez and Weinstein (1999), according to which teachers tend to underestimate children they perceive as immature or insecure, and to overestimate children perceived as interesting, assertive, and independent. In other words, it seems that teacher expectations for student achievement in academic areas are moderately “contaminated” by a certain number of characteristics attributed to the child, that do not pertain to the child's classroom behaviour, but to it's perceived interest, motivation and maturity. When teacher expectations are inaccurate, such halo effects is more visible.

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