

Teacher Expectations and Student Characteristics

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Teachers and student teachers ($N = 208$) enrolled in summer school courses at Memorial University were presented with a fictitious report card for a Grade 6 pupil, with a photograph attached. Report cards were varied only by the gender and attractiveness of the student portrayed; this is essentially a replication of earlier experiments by Clifford and Walster (1973) and Clifton and Baksh (1978). An attempt was made to extend the findings of these studies in two ways: first, by expanding the number of dependent measures included; and second, by using a regression analysis to compare the relative importance of student gender, student attractiveness, and teacher's education in differential expectations. Expectation effects due to attractiveness or gender were rather meagre. Furthermore, for about half the expectation items studied, the amount of the teacher's university education contributed more to the variance of the dependent measures than did student characteristics. In addition, it was noted that increasing education tends to be associated with more *negative* expectations about children. Implications for research on teacher expectations are discussed with reference to teacher training programs.

On a remis à 208 professeurs et stagiaires en enseignement engagés pour la session d'été à la Memorial University un faux bulletin de notes à un élève de 6^e année auquel on avait joint une photo de l'élève. Les bulletins étaient identiques, sauf pour le sexe (genre) ou l'aspect physique de l'élève. Ce test est une réplique des expériences antérieures de Clifford et Walster (1973) et Clifton et Baksh (1978). On a essayé d'étendre les résultats de leurs tests de deux façons: premièrement, en augmentant le nombre de variables dépendantes; deuxièmement, on utilisant une analyse de régression pour comparer l'importance du sexe (genre) de l'élève, son aspect physique et la scolarité du professeur par rapport aux attentes envers l'élève. Le sexe et l'aspect physique de l'élève influent peu sur les attentes. De plus, pour plus de la moitié des attentes, la scolarité du professeur avait une plus grande influence que les caractéristiques de l'élève. Enfin, on a constaté que plus la scolarité du professeur est élevée plus il a d'attentes *néglatives* envers les enfants. On traite des influences de ce test sur les recherches ayant trait aux attentes (aspirations) des professeurs en tenant compte des effets possibles sur les programmes de formation des maîtres.

For a variety of theoretical, ideological and practical reasons, the notion of teacher expectations has generated a great deal of controversy and continuing research since the original Rosenthal and Jacobson (1968) study. Because of the evaluative task inherent in the role of teacher, educators have been concerned about the likelihood that teachers' perceptions of students may be subject to biases, and will therefore lack an entirely rational basis. In spite of this vast quantity of research, there has been little systematization of the knowledge concerning teachers' expectations.

One problem with the research to date has been that "expectations" have been defined implicitly as a unitary construct. Researchers typically select dependent measures, apparently at random, from a variety of

characteristics which are susceptible to biases. The assumption is, that any of these single measures is a sample of the unidimensional, undifferentiated construct. Little attention has been paid to the nature of the dependent variables, or to the possibility that not all expectation measures will be influenced by the same student characteristics. There may, indeed, be several types of expectations. The multi-dimensional character of expectations may explain some of the reported difficulties in replicating the findings of various studies.

A further weakness of this research is that there has been little attention given to teachers' characteristics which may predispose them to expectation effects. There is, of course, no reason to presume that all persons are equally susceptible to expectation effects, and indeed, there is a great deal of evidence in personality theory and social psychology to suggest otherwise.

This article reports a replication of an earlier investigation by Clifton and Baksh (1978). The present study, however, extends the variety of dependent measures as a means of checking for consistency of effects across variables, and it uses regression analysis, to assess the relative importance of teacher and student characteristics.

FACIAL ATTRACTIVENESS AND EXPECTATIONS

The majority of experimental studies investigating the relationship between facial attractiveness and teacher expectations have used a fictitious, standard report card with a photograph attached that varies the facial attractiveness of a student. Estimated IQ is the most commonly studied dependent variable in these experimental investigations and expectation effects on this variable are relatively consistent. Five studies (Adams, 1978, Adams & Cohen, 1976; Clifford, 1975; Clifford & Walster, 1973; Clifton & Baksh, 1978) report that facial attractiveness significantly affected estimates of IQ; two studies failed to find significant effects (LaVoie & Adams, 1974; Rich, 1975). Alternatively, subjects are often asked to estimate the fictitious student's ultimate educational level (Adams & Cohen, 1976; Clifford, 1975; Clifford & Walster, 1973; Clifton & Baksh, 1978). While it can be anticipated that immediate expectations about the child might be influenced by attractiveness, some studies report the additional curious finding that the child's attractiveness affects teachers' estimates of *parental* interest in the child's education (Clifford, 1975; Clifford & Walster, 1973; Clifton & Baksh, 1978). In all cases where differential expectations have been found, these differences favour more attractive children.

These three variables (IQ, ultimate education, and parental interest) are relatively abstract conceptualizations of the child and may be especially susceptible to expectation effects. Other studies fail to demonstrate the effects of facial attractiveness on expectations for more immedi-

ate measures related to achievement (e.g., grade point average, percentile rank, essay evaluations), work habits, attitudes to school, or expected quality of teacher-student interaction (Adams & Cohen, 1976; Adams & LaVoie, 1974; Kehle, Bramble & Mason, 1974; LaVoie & Adams, 1974).

Only a few studies have been conducted on the relationship between attractiveness and teacher expectations in natural classroom settings, and it is difficult to draw firm generalizations. Clifford (1975) found no relationship between attractiveness and measured IQ, standardized test scores, or teacher-assigned grades. Lerner and Lerner (1977), on the other hand, report significant relationships between teacher ratings of attractiveness and mid-year ratings of peer relations, estimated achievement, and adjustment to school. Two studies have investigated classroom interaction and attractiveness. Adams and Cohen (1974) found a grade $\times$ attractiveness interaction, with attractiveness positively related to amount of teacher-student interaction for older children. Algozzine (1977) found that attractive children receive more positive interactions, and a gender $\times$ attractiveness interaction, with attractive boys and unattractive girls receiving the most negative interaction from teachers.

EXPECTATIONS AND STUDENT GENDER

While estimated IQ, expectations for ultimate education, and parental interest, as well as some aspects of actual teacher-student interaction appear to be influenced by facial attractiveness, these variables seem not to be related to student gender (Adams, 1978; Adams & Cohen, 1976; Adams & LaVoie, 1974; Clifford, 1975; Clifford & Walster, 1973; LaVoie & Adams, 1974; Rich, 1975). However, expectations for conduct do appear to be related to gender, with teachers expecting more favourable classroom behaviour from female students (Adams, 1978; Adams & LaVoie, 1974; Kehle, Bramble & Mason, 1974). Similarly, expectations for social behaviour, work habits, and attitudes to school seem to be influenced by gender (Adams, 1978; Adams & LaVoie, 1974; Clifford & Walster, 1973). Boys are expected to be less likely to meet the normative, behavioural demands of the classroom. Gender differences in expectations are generally not found in measures of expected achievement (grade point average, percentile rank, essay ratings), parental interest and involvement, or ultimate education and occupation (Adams & Cohen, 1976; Adams & LaVoie, 1974; Clifford, 1975; Clifford & Walster, 1973; Finn, 1972; LaVoie & Adams, 1974).

TEACHER CHARACTERISTICS AND EXPECTATIONS

Little attention has been paid to the relative importance of teacher characteristics in teacher expectations. DeMeis and Turner (1977) found that stereotyped teacher attitudes based on race and social class had an

impact on teachers' evaluations of student responses. However, length of time since teacher's graduation, amount of graduate training, and amount of experience teaching black students did not influence evaluations. Crowl and MacGinitie (1974) noted some stereotyping of teachers' expectations by race of student, but teachers most susceptible to stereotyping could not be differentiated on the basis of gender, age, years of teaching, grade level taught, or proportion of blacks taught. Clifton and Baksh (1978) hypothesized that teacher education mitigates the effects of expectations, and found significant differences by subjects' year of university, although the direction of the trends was not clear.

METHOD

Procedures

The present study was both a replication and an extension of the Clifton and Baksh (1978) study of physical attractiveness and teacher expectations. Essentially, the procedure involved presenting student-teachers and teachers with a questionnaire and a standard report card which systematically varied pupil gender and attractiveness by means of an attached photograph. The questionnaire requested some biographical data, and contained 16 expectation items.

The report card and questionnaire were presented to student-teachers and education students as an evaluation of the usefulness of a particular format for report cards, and two items, intended as distractor items, measured opinions about the adequacy and usefulness of the report's information.

The report card included with the questionnaire was virtually identical to that used by Clifton and Baksh (1978). The report contained letter grades for ten subject areas over three academic terms; the grades suggested that the pupils were achieving at about an average level. Also included on the report were teachers' general comments about academic achievement and social relations for each of the three terms. These comments suggested some improvement in academic achievement over the course of the school year.

As noted earlier, a photograph of an attractive or unattractive male or female pupil was attached to each report card. The same 12 photographs used by Clifton and Baksh (1978) and Clifford and Walster (1973) were used in the present study. Clifford and Walster (1973) selected these 12 photographs by having a panel of 20 educators rate a large number of photographs of Grade 6 pupils. Clifton and Baksh (1978) obtained ratings of attractiveness from their subjects in order to validate the Clifford and Walster categories. In the present study, the attractive/unattractive dichotomies used in the other studies were maintained. No ratings of attractiveness were obtained in this study, because of the existing validation data and the possibility of alerting subjects to the true

nature of the study by obtaining such ratings. Six photographs were of males and six of females; there were three males and three females at each of two levels of attractiveness.

Based on a survey of past literature in the area, an expectation questionnaire was designed for the present study. Using the 2-factor model proposed by Williams (1976), 16 items were included on the scale, eight presumed to measure cognitive expectations, and eight to measure normative expectations. *Cognitive* expectations, those relating directly to academic achievement, included predictions of Grade 7 average, ultimate educational attainment and ultimate occupation; estimates of IQ, speed of learning, over- or underachievement, and achievement on a standardized achievement test; and ratings on curiosity. *Normative* expectations, those related to classroom behaviour, included ratings of motivation, relationships with other pupils, conduct, attitudes towards school, cooperativeness, ambition, work habits, and attentiveness. Fourteen of these items were rated with 5-point scales, while two (predicted educational attainment and predicted occupation) were rated with 7-point scales.

Finally, the questionnaire requested some biographical data about the participants: gender, age, year of university, program, amount of teaching experience, size of community of residence, and size of community of employment.

Subjects

Subjects were 208 education students at Memorial University, all enrolled in summer school courses. The questionnaire was administered by someone other than the usual classroom lecturer, and students could choose to participate or not. Of those students involved, 78% were working towards a Bachelor of Education degree or a diploma in special education. The mean age was 26 years, with a median of 2.68 years of teaching experience. Only 27% of the students had no teaching experience. It should be noted that this sample is substantially different from the Clifton and Baksh sample in terms of teaching experience. The majority of the sample resided in small communities: 36% in towns of less than 2,000 and 40% in communities of between 2,000 and 20,000. Approximately 18% lived in St. John's.

Data Analysis

In order to determine the relative importance of student attractiveness and teacher education on teacher expectations, a stepwise regression with forward inclusion was used, with student attractiveness, gender, and teacher's education as the predictor variables, and the 16 expectation items as the dependent variables.

Results

For eight of the variables (IQ, over- or underachievement, motivation, work habits, speed of learning, predicted education, attentiveness, and curiosity), teacher's year of university was entered into the regression equation on the first step. This indicates that year of university accounts for more of the variance in the dependent variables than either student facial attractiveness or gender. For seven variables (predicted occupation, peer relationships, attitudes to school, ambition, estimated achievement on a standardized test, predicted grades, and conduct), gender was entered into the equation on the first step. Attractiveness accounted for the largest proportion of variance in only one variable, cooperation. Furthermore, there were *no* statistically significant effects related to attractiveness alone, while five variables were significantly predicted by teacher's year of university, and one was significantly predicted by student gender. R^2 values, beta weights, and F -ratios (to test the significance of beta¹) for teacher's year of university, student gender, and attractiveness are presented in Table 1. R^2 values specify the proportion of variance accounted for by the predictor variables, that is, year of university, attractiveness, and gender. It will be noted that R^2 values are quite small, the largest representing 3.6% for the relationship between year of university and IQ, and 3.6% for gender and conduct. The *beta-weights* are standardized regression coefficients which indicate the strength and direction of the relationship between the two variables. For year of university, positive beta-weights indicate increasingly positive expectations with more education. For attractiveness, the F -ratios indicate that none of the beta-weights is significant. For gender, positive values indicate more positive expectations for girls than for boys.

In the present study, then, it was found that increasing education causes teachers to estimate students' IQs more favourably, but over- or underachievement (in relation to IQ), motivation, work habits, and attentiveness are all rated more negatively by teachers with more education. The fact that the correlation between amount of education and actual teaching experience was quite small ($p = +.127$, $t_{207} = 1.827$, n.s.) suggests that the effect is related to the teacher's own educational experiences rather than to the demand characteristics of teaching. Student attractiveness was not at all related to teacher expectations. Student gender was significantly related to teacher's expectations for classroom conduct, with more positive conduct expected from girls.

Discussion

In the present analysis, the physical attractiveness manipulation did not create differences in teachers' expectations; the findings of Clifford and Walster (1973) and Clifton and Baksh (1978) were not replicated. Since

TABLE 1
Regression Analysis of Expectation Variables on Teacher's Education and Student Characteristics

	Over- or Under Achieve- ment	Motivation	Occupation	Peer Relations	Coop- eration	Work Habits	Attitudes	Ambition	Speed of Learning	Estimated Achieve- ment	Predicted Education	Predicted Grades	Attentive- ness	Curiosity	Conduct
Year of University															
R ²	.036	.019	.013	.002	¹	.018	.010	.001	.016	<.001	.006	.001	.030	.016	.002
Beta	0.193	-0.145	0.114	-0.038		-0.136	-0.104	-0.023	0.129	-0.013	0.076	-0.028	-0.176	-0.130	0.043
F	7.841**	4.474*	n.s.	n.s.		3.856*	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	6.525*	n.s.	n.s.
Student Attractiveness															
R ²	.001	.002	.003	<.001	.001	.001	¹	<.001	.003	.009	<.001	.006	.001	.006	.001
Beta	-0.030	0.107	0.050	0.018	0.026	0.036		0.007	0.054	0.095	0.014	0.079	-0.029	0.074	-0.025
F	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Student Gender															
R ²	.003	.030	.020	.013	.001	.003	.011	.006	<.001	.010	¹	.014	.007	.001	.036
Beta	-0.055	0.101	0.103	-0.112	0.024	0.053	0.109	0.078	-0.017	-0.101		0.120	0.083	0.033	0.186
F	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.		n.s.	n.s.	n.s.	7.318**

NOTE: All of the *F*-ratios have 1,204 degrees of freedom.

¹ Tolerance-level insufficient for computation

* *p* < .05

***p* < .01

there have now been a number of studies of the relationship between pupil attractiveness and teacher expectations, it may be that awareness of such biases on the part of teachers has increased. Indeed, there is evidence to suggest that mere awareness of expectation effects is sufficient to enable teachers to overcome them.

Student gender had a significant impact on only one of the expectation measures, classroom conduct. This supports the generalization drawn from other expectation studies that teachers expect boys to have more difficulty meeting the normative, behavioural requirements of the classroom. Gender differences were expected on several other normative measures (for example, motivation, work habits, attitudes and attentiveness), but were not substantiated.

In contrast to these relatively meagre expectation effects resulting from student characteristics, expectations were influenced by the teacher's education on five of the 16 variables. This study, therefore, points out the relative importance of teacher characteristics. The Clifton and Baksh (1978) sample included education students, the majority of whom had no teaching experience. The majority of the present sample, on the other hand, were experienced teachers. It is possible that practising teachers do not exhibit the same types of expectation effects as education students; perhaps some of the differences between findings in natural and experimental settings are related to subject characteristics. This is an additional possibility to the usual explanations of artifactual differences resulting from differential demand characteristics of research in the two types of settings: in natural settings, teacher expectations are embedded in the context of an ongoing, long-term interaction with students, while this is clearly not the case in the experimental research setting.

Clifton and Baksh (1978) hypothesized that year of university would be a moderating variable in expectancy formation. Specifically, they suggested that the socializing influences of the university program might reduce the likelihood that student teachers would rely on such superficial factors as physical attractiveness, in forming opinions about students. While that study's data did suggest that year of university had some influence on expectations, the effects were not consistent.

The regression analysis of this study permits inferences about the direction of the influence of education on expectations assuming that the effects are linear. Furthermore, the use of a wide variety of expectation measures permits speculation and inferences about the types of attitudinal changes occurring in relation to the education program. While education showed no moderating effect on eleven of the variables under investigation, there were significant effects on five variables. These findings may generate some concern. It appears that teachers with more education judge pupils' IQs more positively, suggesting that teachers place an increasing amount of confidence in pupils' abilities. Conversely, teachers with more education view students as less motivated, less

attentive, less likely to overachieve (in relation to IQ), more likely to underachieve, and less likely to possess satisfactory work habits. This combination of expectations – greater innate ability, but less attentiveness and motivation – may reflect a teacher frustration with the educational process. This suggests a serious shortcoming in teacher education and training.

A further possibility is that teacher self-confidence gradually erodes in the face of a large body of knowledge, various methodologies, and apparently conflicting points of view. While the existing research has focused on the effects of practice teaching rather than on the outcomes of education courses *per se*, findings in the former area support this interpretation. For example, Greenstein and Greenstein (1973) report that student teachers had become significantly more authoritarian and Machiavellian by the end of their practice teaching experience. Similarly, practice teaching placements may have a negative impact on self-concept, at least temporarily (Clifton, 1979; Gregory & Allen, 1978). Whether these conflicts are resolved, exacerbated or merely forgotten as teaching experience accumulates is a question for future research. A more immediate issue, however, appears to be the effectiveness of teacher education programs for achieving affective outcomes.

NOTE

- ¹ Strictly speaking, the *F*-test is performed on the unstandardized regression coefficient rather than on the standardized coefficient. However, standardized coefficients are more easily interpreted and are therefore presented here. The significance of the *F*-ratio presented is not affected.

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