## Research Note:

The Effect of Physical Attractiveness on Teacher Expectations

Margaret M. Clifford University of Iowa

Elaine Walster
University of Wisconsin

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Rosenthal and Jacobson found that a teacher's expectations about a child's behavior strongly influence his actual behavior. Generally, teachers form their first impressions of children, and thus develop their expectations for them, from two sources of information—the children's school record and their physical appearance. In this experiment, teachers were given objective information, presumably about a child's scholastic and social potential, accompanied by a photograph of an attractive or an unattractive boy or girl. It was found that the child's attractiveness was significantly associated with the teacher's expectations about how intelligent the child was, how interested in education his parents were, how far he was likely to progress in school, and how popular he would be with his peers.

ROSENTHAL AND JACOBSON (1968) argue that a teacher's expectations as to how a child will behave have an enormous impact on how the child does behave. To prove this assertion, they conducted an experiment in a public elementary school. They gave students a standard IQ test, telling the teachers that this test measured "intellectual blooming." The researchers chose 20 per cent of the children at random, and informed their teachers that the test had identified them as very special children who would "bloom" (show a marked intellectual "spurt") within the next year. One year after this deception, the same IQ test was again administered to all children.

The results revealed that the teachers' expectations did indeed have an enormous impact on students' performance. The supposed "bloomers" showed far more improvement in IQ than did the other youngsters; gains were especially pronounced for the

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first and second graders who had been labeled "bloomers." In accounting for this phenomenon, Rosenthal and Jacobson speculate that teachers were probably more encouraging and friendly to those children whom they expected to "bloom." Their expectations thus served as a self-fulfilling prophecy.

Critical reviews of this particular study and similar research are available (Barber and Silver, 1968a, 1968b; Thorndike, 1968, 1969; Gephart, 1969; Snow, 1969; Fleming and Anttonen, 1971). The issues being challenged are typically methodology, procedure, and analysis rather than the existence of a relationship between

expectations and related behavior.

Social psychologists have repeatedly demonstrated that an individual's first impressions of another person affect his subsequent interactions (Dailey, 1952; Newcomb, 1947) and that one's expectations influence one's behavior (Zajonc and Brickman, 1969; Brock and Edelman, 1965; Aronson and Carlsmith, 1962). Educational psychologists have also demonstrated relationships between teachers' attitudes toward students and the students' performance (Kranz, 1970; Palardy, 1969; Rist, 1970). Given the consistency of these results, it is obviously important to identify variables that have early effects on the formation of attitudes toward others.

Two of the most common sources of information from which a teacher can form a first impression of a student are the child's school record and his appearance. Our study was designed to examine effects of the latter variable while holding the former constant. Specifically, our experiment was designed to determine what effect a student's physical attractiveness has on a teacher's expectations of the child's intellectual and social behavior.

Our hypothesis was that a child's attractiveness strongly influences his teachers' judgments; the more attractive the child, the more biased in his favor we expected teachers to be. The design required to test this hypothesis is a simple one: Teachers are given a standardized report card and an attached photograph. The report card includes an assessment of the child's academic performance as well as of his general social behavior. The attractiveness of the photos is experimentally varied. On the basis of this information, teachers are asked to state their expectations of the child's educational and social potential.

### Method

Subjects

Five hundred and four elementary principals were selected from the school directory for the state of Missouri. A report card with an attached photo, a copy of a letter to a teacher, and an opinion sheet were mailed to each principal. He was asked to consider the materials and, provided they met his approval, to forward them to a fifth grade teacher. (If the school had more than one fifth grade teacher, we specified which one should receive the materials.) These fifth grade teachers were our subjects.

#### Materials

The Student's Summary Record: The first item was a fifth grade student's report card with a photograph attached. This record was scored with an S-U (satisfactory-unsatisfactory) scale and provided a fair amount of information. It itemized the student's absences during the school year. It reported his grades (during six grading periods) in the content areas of reading, language, arithmetic, social studies, science, art, music, and physical attitudes. The report card was filled out for an above-average student, who had presumably received a total of 28 "S+'s," 34 "S's," 4 "S--'s," and no "U's."

Photographs: Twenty educators independently rated a collection of school photographs obtained from fifth grade teachers.¹ On the basis of these ratings, twelve photographs were selected—three pictures of attractive boys, three of attractive girls, three of unattractive boys, and three of unattractive girls. Twelve different pictures were used, to increase the generalizability of the findings. We did not wish extraneous effects, which might result from such factors as sex, hair length, chubbiness, and glasses, to be confused with attractiveness. We hoped that the wide selection of pictures would help to avoid this problem. In Missouri schools, a student's photograph routinely accompanies his school record, so the inclusion of the pictures required no special explanation for our teacher subjects.

Opinion Sheet: The opinion sheet consisted of the following four items: (1) "I would estimate that the child has an IQ of \_\_\_\_\_." Possible answers ranged from 1 (96–100) to 7 (126–130). (2) "I would speculate that the child's social relationships with classmates are \_\_\_\_\_." Range of possible answers: from 5 (very good) to I (very bad). (3) "I would guess that the parent's attitude toward school is one of \_\_\_\_\_." Range: from 6 (strong interest) to I (strong indifference). (4) "I would predict that the student would continue school through \_\_\_\_." Range: from I (2 years high school) to 7 (Ph.D.). At the bottom of the opinion sheet, teachers were asked to indicate their sex. Space was also provided for the teachers to comment on their reactions to the report card format and the type of information it provided.

<sup>&</sup>lt;sup>1</sup> These photos were of middle-class children, who were neatly dressed, and who were smiling or had tranquil expressions.

#### Procedure

The principal turned over to the teacher a personal letter, the student's report card with attached photo, and the opinion form. The letter to the teacher was used primarily to seek his cooperation. It began by questioning the value of school records:

How purposeful are permanent record files? How revealing are report cards? Do they provide information that really helps us understand the pupil as an individual? All of us educators realize the importance of dealing with students on a one-to-one basis—the importance of establishing a unique, personalized realtionship with each child. Does the permanent record file or summary report card facilitate "getting acquainted?" Can the teacher, confronted with a new class of students, use the files to get a "head start?" . . . .

The letter then explained that in an attempt to answer these questions, we were examining a variety of report card forms used by school systems. The teacher's reactions would guide us in identifying the best forms. Thus, we were asking teachers to examine the summary sheet of a fifth grade student and to give their best estimate of four important pieces of information: (1) pupil's IQ, (2) pupil's social status with peers, (3) parental attitudes toward school, and (4) pupil's future educational accomplishments.

Within two weeks, 60 per cent of the teachers had returned their questionnaires. At that time, a follow-up letter and a set of materials identical to the original set were mailed to each non-respondent. After another three weeks, data collection was terminated with 441 (87 per cent) returns. Of these, 12 were unanswered for the expressed reason that the school did not have a fifth grade and 22 were simply returned without explanation. Three were discarded because the subjects' replies were incomplete. Thus, our analysis was based on 404 responses.

#### Results

From the data summarized in Tables 1 and 2 it is evident that our hypothesis has been confirmed. As we predicted, attractive children appear to have a sizable advantage over unattractive ones.

We examined the impact of attractiveness on the teacher's perception of the child's educational potential. The teacher's assessment of (1) the student's IQ, (2) his future education, and (3) his parents' interest in academic achievement were combined to form a single index of Perceived Educational Potential. (Possible scores ranged from a low of 3 to a high of 18.) A test based on this index showed that teachers did perceive attractive children to have higher educational potential than unattractive children. An analysis of the three items comprising the index indi-

TABLE 1

Means, Standard Deviations, and Relevant Significance Tests for High and Low Attractiveness

Descriptive Statistics	S					
Attractiveness of Student	(Ž	IQ (Item 1)	Parental Interest (Itcm 2)	Educational Attainment (Item 3)	Educational Potential (Sums of Items 1–3)	Social Potential (Item 4)
High	(203)	3.33	4.66		11.04	3.54
····	7001	1.09	.95	.96	2.27	.74
row.	(201)	2.98	4.38	2.65	10.01	3.25
		1.10	1.03	.94	2.42	.72
Significance Test						
Attractiveness		"1/402 d.f.=10.53*	7.64*	18.67**	19.60**	15.04**

 $^*$  p<.01.  $^{**}$  p<.001. Mean over Standard Deviation,

TABLE 2

Means, Standard Deviations, and Relevant Significance Tests by Subgroups

Descriptive Statistics	stics							
							Educational	
					Parental	Educational	Potential	Social
	•			2	Interest	Attainment	(Sum of	Potential
Attractiveness	Sex of	Sex of Rater	Z	(Item 1)	(Item 2)	(Item 3)	Items 1–3)	(Item 4)
מר מומיבור				9.07	4 90	3.43	10.79	3.43
High	Male	Male	(T.F.)	1.03	1 65	1.40	2.78	.82
		,	(00)	00.0	4.65	3.11	11.04	3.45
High	Male	Female	(88)	03.50	8 8	86	2.19	77.
		,		10.1	. 4 15.	2.79	10.79	3,43
High	Female	Male	(14)	5.0		17	2.04	.56
i			(	18. 6	7.5	2.99	11.13	3.60
High	Female	Female	(00)	1.5	: = =	8.	2.27	.72
			(00)	1. C	4.64	25.55	10.14	3.05
Low	Male	Male	(22)	1.09	- 65 - 65	88.	2.07	.71
			į	1.02	. 4	89. 8	10.00	3.31
Low	Malc	Female	(6/,)	7.03	7. F.	20,0	2.50	69.
			į	1.25	1.01	8.	10.50	3.50
Low	Female	Male	(16)	3.13	00.1	96.6	2.45	.94
				9.00	86. 7	27.6	9.90	3.22
Low	Female	Female	(88)	20.0	1.10	000	2.42	.68
ł				1.00	1.00		[	
Significance Tests	sts	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		77	QU	09.	70.	4.80*
Sex of Student	ı	*1/396≡ 7: /303		1.1	76	90.	80.	.16
Sex of Teacher	ı	$^{*}1/396 = ^{*}1/396 = ^{*}1$		.16	1.17	1.38	.34	1.56
Threfactions		-000/4						
**								

\* p .05 Mean over Standard Deviation

cated that the child's physical attractiveness was associated with the teacher's reactions to all three items making up the index. Teachers expected attractive children to have higher IQ's 2, to have parents especially interested in academic achievement, and to get more future education than their less attractive counterparts.

The teacher's perception of the student's social potential was assessed by examining the teacher's rating of the student's probable success with classmates. (Possible scores ranged from 1 to 5.) Teachers did expect attractive children to have far better relations with their peers than unattractive children. In assuming that attractiveness breeds popularity, they were undoubtedly perceiving reality clearly. A variety of experiments have shown that attractiveness is an important indicator of how well students will be liked by others (Walster, et al., 1966; Brislin and Lewis, 1968; Walster, et al., 1971).

## Additional Data Snooping

In this experiment, we were primarily interested in the main effect of attractiveness on Perceived Educational and Social Potential. Thus, we limited the formal statistical analysis to a test of these effects. Different statistical methods are required if one wishes to examine a number of hypotheses in a single experiment. Since this experiment was not designed to investigate additional questions, the results that follow are not conclusive. They are reported in order to suggest possible inquiries for future research in the area.

A review of educational literature on sex differences suggests the following speculations:

1. Although researchers have frequently failed to find significant differences between girls' and boys' IQ's (McNemar, 1942; Havighurst and Janke, 1944; Hughes, 1953), there is evidence that girls overachieve more frequently than do boys (Phillips, 1962; Schmuck and Van Egmond, 1965). Therefore, given a standardized report card from which to estimate IQ, it may be speculated that teachers would indicate a higher IQ for a boy student than for a girl. In our study, however, the sex of the child did not affect the teachers' perception of IQ.

2. Teachers might be expected to predict that boys will attain higher levels of education than girls. Parents expect males to get more education than females (Aberle and Naegele, 1953), and discriminatory admission committees assist them in doing so

<sup>&</sup>lt;sup>2</sup> The IQ's of the unattractive boys averaged 136 (134 and 138); the IQ's of the attractive boys averaged 117 (103, 115, and 133). IQ scores could be secured for only one attractive girl and five of the male students.

(Walster, Cleary, and Clifford, 1971). Our data provide no evidence that the child's sex influences teachers' expectations with

respect to his future education.

3. On the basis of student ratings, teacher ratings, and behavioral data, boys tend to be more aggressive, more antisocial, and more negativistic than girls (Tuddenham, 1952; Spach, 1951; Sears, 1961; Feshbach, 1956; Sanford, Adkins, Miller, and Cobb, 1943; Digman, 1963). Thus, one might speculate that teachers would rate girls higher than boys on social relations with their peers. Our data suggest that such a trend may exist.

It is important to know whether the child's attractiveness interacted either with the sex of the teacher making the ratings, or the sex of the child who was being rated. It may be asked, for example, whether attractiveness is more important in shaping teachers' expectations about girls than about boys. Our initial analyses were not designed to answer such questions since we made no prediction concerning these interactions. However, we did rerun our analyses in order to determine whether these variables interact in an important way. They do not. Regardless of whether the teacher is male or female, and regardless of whether the pupil is a boy or a girl, the child's physical attractiveness has an equally strong association with his teacher's reactions to him.

#### Discussion

There is little question but that the physical appearance of a student affected the expectations of the teachers we studied. Support for this was found not only in the data we analyzed but also in such comments as the following (made by teachers at the bottom of their opinion sheet):

This boy appears to be slightly sullen in picture. I realize not too much can be established by a picture—I would feel that the boy is not as good a student as the report card indicates.

I found myself judging much on the photo when I wasn't too sure of my answer.

The child's "clean-cut" look influenced my opinion on number I (i.e., IQ).

Some teachers carefully justified their responses on the basis of the changes in the child's grades over the six marking periods. One teacher, who gave a low rating (a score of 2) on parent attitude, focused on the first five grading periods and commented:

Here the child's general attitude, shown by check marks, indicates parental neglect of these same habits at home.

Another teacher, who rated a child high (a score of 5) on this same item, focused on the final grading period and explained:

If the child's grades hadn't improved in the 6th mark period I would be inclined to say that her parents were indifferent.

The first of these two raters was evaluating an unattractive girl, while the second teacher was evaluating an attractive girl.

With the increasing concern for the multiplicity of factors which affect the child's scholastic performance, specification of the sources of bias are important. Educators as well as parents should be sensitive to the unusual impact a child's attractiveness may have on the way he will be treated by others. Unlike such biasing factors as race or socioeconomic status, many of the variables that contribute to physical attractiveness can probably be manipulated with relatively little difficulty. But where the parent and/or child is unable or unwilling to control attractiveness, teachers will want to make certain that the child's physical features do not operate as an unwarranted detriment to his intellectual devolpment.

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