

Influence of Children's Physical Attractiveness on Teacher Expectations

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ABSTRACT. Ratings of the physical attractiveness of 1,006 11- to 12-year-old children were obtained, and the association between physical attractiveness and teachers' judgments of these children on a number of measures was examined. There appeared to be reasonable agreement between teachers' ratings of children's physical attractiveness, judges' ratings, interviewer's ratings, and children's self-ratings of attractiveness. Teachers' ratings of attractiveness were significantly correlated with their judgments of children's sociability, popularity, academic brightness, confidence, and qualities of leadership. Teachers revealed a systematic tendency to rate girls higher than boys, and significant sex differences were observed in teachers' ratings of attractiveness, academic brightness, sociability, and confidence.

THE LITERATURE concerning the effects of physical attractiveness suggests that appearance may be a potent source of social stereotyping (see Adams, 1982, for a review of this literature). Accumulating research indicates that an individual's physical attractiveness is an important social cue used by others as a basis for social evaluation (Berscheid, 1981; Berscheid & Walster, 1974; Dion, 1972). It has been demonstrated, for example, that physically attractive young adults, both male and female, are assumed to possess more socially desirable personalities and to lead more successful and fulfilling lives than are those individuals of lesser attractiveness (Berscheid,

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1981; Dion, Berscheid, & Walster, 1972). Stereotypes associated with physical appearance may be broadly classified in terms of two dimensions, the social and the intellectual, with physically unattractive individuals being perceived as disadvantaged in both (Adams & Huston, 1975). There is also some suggestion that the effects of a physical attractiveness stereotype may be present at an early developmental level (Berscheid & Walster, 1974), and that physical attractiveness may be more socially and psychologically influential for females than for males (Bar-Tal & Saxe, 1976).

Different cultures have different conceptions of physical beauty, and within a given society styles of beauty come and go from year to year. Anthropologist Edgar Gregersen (1982) noted that specific universals of physical attractiveness are hard to discover, and that it is almost impossible to specify any cross-culturally valid notions of physical attractiveness. Gregersen (1982) commented that beauty may be in the eye of the beholder, but the beholder is culturally conditioned to begin with, so that variations will always exist in ideal types (p. 81). A substantive part of the research concerning the effects of physical attractiveness has been conducted on Americans, and although it is accepted that certain aspects of physical appearance may be highly culturally relative, it seems likely that the same persistent and widely shared standards of physical attractiveness may be found in Britain as in America (Gergen & Gergen, 1981).

Within the literature on the social psychology of education it has often been suggested that the relationship between the child and teacher may be directly influenced by the teacher's expectations of the pupil's ability and potential achievement. This expectation has been referred to as a self-fulfilling prophecy. Research regarding the influence of teacher expectations on children's academic performance and on the quality of teacher-pupil interactions has stemmed from the initial work of Rosenthal and Jacobson (1968). The concept of the educational self-fulfilling prophecy is controversial because researchers have had only partial success demonstrating the effect in the classroom (see Blease, 1983, for a review of this literature).

According to Braun (1976), intricate interactions between factors appear to have contributed to the conflicting results of replications of the Rosenthal and Jacobson (1968) study, but it is these factors that lend interest and challenge to continued investigation into the complexity of the pupil-teacher interactive process. Braun (1976) noted that although it is vital to consider how the child registers expectancy cues and which cues he or she chooses to internalize, it is of equal importance to consider variables related to the induction of differential expectancies by the teacher. Sources of input to teachers' expectancies are well documented. Elashoff and Snow (1971) summarized the impact of a few of these sources:

Teachers . . . form impressions based on physical appearance and conduct . . . achievement, I.Q. scores, or the general characteristics of older siblings or par-

ents. These impressions . . . may produce expectations about pupil behavior and future achievement. . . . When teachers characterize pupils they are likely to label them as "good" or "bad." Clean children may be "good," dirty ones "bad"; or they may be "fast" or "slow" learners. (p. 63)

There is some disagreement between studies on the degree to which physical appearance does influence teachers' expectations. Clifford and Walster (1973) concluded that attractive children were perceived by teachers as possessing a higher IQ, greater educational potential, and more interested parents than less attractive children. Further evidence to support physical attractiveness as an important variable influencing expectations is given by Dion (1972), who found that attractive children were perceived as less likely to be antisocial than unattractive children. He reported that attractive children who commit unacceptable acts were perceived as more honest and pleasant than unattractive children with similar behavior profiles. Kehle, Bramble, and Mason (1974) found that children of below-average facial attractiveness received significantly more neutral or negative verbal attention than children of above-average facial attractiveness. It has been shown that teachers have less favorable academic expectations in the case of unattractive children (Aloia, 1975; Clifford, 1975), and that teachers rate children's general behavior and personality less favorably (Rich, 1975). Felson (1980) examined the relationship between a number of variables related to academic performance and physical attractiveness in a national sample of over 2,000 10th-grade boys in the United States. The evidence suggests that teachers assigned higher grades and attributed more ability to attractive children. Felson's results support those of Clifford and Walster (1973). Adams (1982) noted, however, that the relationship between physical attractiveness and actual (as contrasted with estimated) achievement is complex, and is likely to be influenced by a variety of contextual variables.

Some evidence contradicts the findings of the aforementioned studies. Shaw and Humphreys (1982) determined whether the presence of dentofacial anomaly in a child would unfavorably bias a teacher's expectations of the child's scholastic potential, social relationships, or personality. They found no support either for the hypothesis that children's dental appearance affected teachers' expectations, or for the hypothesis that teachers had higher expectations of children with high background facial attractiveness. In two studies (Adams & La Voie, 1974; La Voie & Adams, 1974), color photographs of students were rated as low, moderate, or high in facial attractiveness. Attached to these photographs were fictitious student progress reports including comments about the student's conduct. Teachers' predictions on all measures were significantly influenced by the child's conduct rating, whereas facial attractiveness appeared to be of little consequence. The question arises whether, given a fictitious situation, the overriding influence of the conduct rating might overshadow variables such as facial attractiveness.

Mendels and Flanders (1973) criticized the emphasis on laboratory-type experimental manipulations used in much of the research attempting to demonstrate the self-fulfilling prophecy. They proposed that artificial or experimental manipulations of teacher expectancy may be lacking in external validity. They argued that naturalistic inputs of variables relating to pupil characteristics may be more potent than such experimental manipulations in influencing teachers' expectancies. Elashoff and Snow (1971), and Adams and La Voie (1974) reviewed the characteristics of children that have the potential to influence teacher expectancy: sex, behavior, attractiveness, physique, academic ability, race, social class, and other personal characteristics such as hygiene and the child's name.

Adams (1978, 1982) suggested that the sex of the child is an important characteristic that can affect teacher-student interactions and expectations. Brophy and Good (1974) concluded that whenever a sex difference is discovered in teachers' ratings or expectations for boys and girls, the girls tend to be rated more favorably. It appears that teachers are more likely to overrate the intelligence and potential of girls and to underrate the intelligence and potential of boys (e.g., Doyle, Hancock, & Kifer, 1972; Palardy, 1969). Similar findings have been discovered in studies of grading practices. Boys received lower grades even though there were no consistent sex differences in measured achievement (McCandless, Roberts, & Starnes, 1972; Peck, 1971). In addition to the main effect that sex of the child may have on teachers' expectations, Kehle, Bramble, and Mason (1974) found that teachers' evaluations of students' essays were affected by an interaction of sex and attractiveness. Whereas the essays of attractive female students tended to be rated higher than those of unattractive females, the reverse was true for the essays of male students.

The purpose of the present study was to conduct a naturalistic investigation of the association between children's physical attractiveness and teacher judgments of leadership, confidence, popularity, academic brightness, and sociability. Judgments of the physical attractiveness of children were made in a variety of contexts to establish the validity and to examine the consistency of ratings of attractiveness. These ratings included ratings of still photographs by independent judges, ratings made on the basis of brief interpersonal contact by an interviewer, ratings made by the children's teachers, and the children's own self-rated attractiveness. Sex differences in teachers' judgments and ratings of physical attractiveness were also examined.

Method

The present research was conducted as part of a longitudinal survey of the social and psychological effects of orthodontic treatment, the general aims and method of which have been described in detail elsewhere (Shaw, Ray,

Frude, Addy, & Dummer, 1986). In a preliminary screening, 4,810 children were listed. The final sample of children was selected by disproportionate stratified sampling (Moser & Kalton, 1979) so that occlusal conditions of low prevalence but high orthodontic interest were well represented in the study cohort. Dental health examinations were conducted for the entire study group in mobile dental units. The psychosocial component of the survey was developed by psychologists to investigate the relationship between children's dental status, their attractiveness, psychological well-being, and their social status. Questionnaires were distributed to the children themselves and to their teachers and parents, and each child was interviewed individually.

Targets

The targets of the attractiveness ratings were 1,006 children from schools in South Glamorgan, Wales (503 boys and 503 girls) between 11.5 and 12.5 years of age. The actual number of children involved in each of the ratings varied due to the refusal of one of the schools to participate in the interview and self-rating aspects of the study, and to the refusal of some teachers to participate in the study.

Measures of Attractiveness

Ratings of still photographs. Two standard 35 mm color transparencies were taken of each child, one with lips gently at rest and one smiling. Photographs were projected onto a screen and judged by five adults (3 women and 2 men), none of whom knew any of the targets personally. Attractiveness was rated on a 100 mm visual analogue scale, the ends of which were *very attractive* and *very unattractive*, and responses were measured in millimeters resulting in a scale ranging from *very unattractive* (1) to *very attractive* (100). Judges first rated all the pictures of the faces with neutral expressions and subsequently rated all the photographs of the smiling faces.

Interviewer ratings. During the course of the investigation, the targets were given a brief interview during which an interviewer rated each child's facial and general physical attractiveness on a scale ranging from *very unattractive* (1) to *very attractive* (7).

Teacher ratings. The children's class teachers were asked to rate each of the target children in terms of physical attractiveness on a 7-point scale ranging from *not at all attractive* (1) to *very attractive* (7).

Self ratings. During the course of the interview, the children were asked to rate themselves in terms of their own attractiveness compared to that of the other members of their class, choosing one of five statements ranging from *one of the worst looking* to *one of the best looking*.

Teacher ratings. In addition to rating children in terms of physical attractiveness, the children's class teachers were asked to rate each of the target children on five 7-point scales each ranging from *not at all* (1) to *very* (7) and to judge the degree to which each child was "a leader," "confident," "popular," "academically bright," and "sociable."

Results

Reliability of Photograph Ratings

Results indicated a reasonable level of interrater reliability in the judgments of the still photographs. Correlations between judges ranged from .21 to .61 (*Mdn r* = .47) for judgments of the unsmiling pictures, and from .38 to .72 (*Mdn r* = .51) for judgments of the smiling pictures. For each target, summary photographic attractiveness scores were calculated by averaging the ratings across the five judges.

Consistency of Attractiveness Ratings

The correlations between measures of attractiveness provided by self-ratings, judges, interviewer, and teachers' ratings of children's attractiveness are presented in Table 1. The teachers' ratings of attractiveness correlated significantly (though not highly) with ratings of attractiveness made by judges, an interviewer, and children's self-ratings of attractiveness. The highest correlations were between teachers' ratings and judges' ratings of attractiveness ($r = .335$), and the lowest correlations were between teachers' ratings and children's self-ratings of attractiveness ($r = .173$). Only one significant difference emerged due to sex of target. The correlation between teachers' ratings and girls' self-ratings of attractiveness ($r = .106$) was significantly lower ($z = 1.661, p < .05$) than the correlation between teachers' ratings and boys' self-ratings of attractiveness ($r = .232$).

Correlations Between Teachers' Ratings of Attractiveness and Teachers' Judgments of Children

The correlations between teachers' ratings of the children's attractiveness and their judgments of the children's leadership, confidence, popularity, academic brightness, and sociability are shown in Table 2.

TABLE 1
Pearson Product Moment Correlations Between Teachers' Ratings of Attractiveness and Self-Ratings, Judges' Ratings, and Interviewer Ratings

Ratings	Teachers' ratings		
	All targets	Boys	Girls
Self-ratings	.173**	.232**	.106*
Interviewer (facial)	.284**	.329**	.243**
Interviewer (general)	.255**	.277**	.225**
Judges (unsmiling)	.325**	.332**	.319**
Judges (smiling)	.335**	.378**	.285**

* $p < .05$. ** $p < .0001$.

TABLE 2
Pearson Product Moment Correlations Between Teachers' Ratings of Attractiveness and Judgments of Leadership, Confidence, Popularity, Academic Brightness, and Sociability

Items	Teachers' ratings		
	All targets	Boys	Girls
Leadership	.426*	.461*	.388*
Confidence	.433*	.426*	.431*
Popularity	.581*	.553*	.603*
Academic brightness	.455*	.417*	.482*
Sociability	.646*	.661*	.624*

* $p < .0001$.

The teachers' ratings of attractiveness correlated with their judgments of (in decreasing order of magnitude) children's sociability, popularity, academic brightness, confidence, and leadership. Teachers' ratings of the attractiveness and sociability of each child correlated highly ($r = .646$, $p < .0001$), as did the ratings of attractiveness and popularity of each child ($r = .581$, $p < .0001$). The correlations between teachers' ratings of attractiveness and academic brightness, confidence, and leadership of each child were less high. No significant differences in the pattern of associations emerged with respect to sex of target.

Sex Differences in Perceptions of Attractiveness

Results indicated only one significant difference in the attractiveness ratings for girls and boys. Teachers regarded the girls as significantly more attractive than the boys, $t(773) = 2.95, p < .003$. The trend observed among all judges was for the mean ratings of attractiveness for girls to be higher than the mean ratings for boys.

Sex Differences in Teachers' Judgments of Children

The mean ratings of teachers' judgments of children's leadership, confidence, popularity, academic brightness, and sociability indicate that teachers did not regard boys and girls as being significantly different with respect to qualities of leadership or in popularity, although the mean ratings for girls were higher than for boys on both these judgments. There was, however, a significant difference in teachers' judgments of the academic brightness of boys and girls, $t(802) = 2.88, p < .004$. Girls were judged as significantly brighter academically than boys. In addition, significant differences between boys and girls emerged from teachers' judgments of their sociability, $t(802) = 2.71, p < .007$, and confidence, $t(805) = 2.25, p < .025$. Teachers regarded the girls as significantly more sociable and confident than the boys.

Discussion

The results of the present study show some significant tendencies on the part of teachers to judge attractive children as more sociable, more popular, academically brighter, more confident, and more likely to be leaders than unattractive children. The associations observed between attractiveness and teachers' judgments were similar for both boys and girls.

We may consider a number of explanations that may account for these significant correlations; it may be the case that highly sociable, popular, confident, bright children are perceived by teachers as being highly attractive. Although the data from this present study do not offer any information regarding the validity of teachers' judgments of children, there did appear to be reasonable agreement between independent ratings of the children's attractiveness based on very different modes of stimulus presentation. The highest (though low) correlations of attractiveness were between teachers' ratings and judges' ratings. This is surprising because it is possible that the teachers' knowledge of the children may have influenced judgments of their physical attractiveness, whereas the judges' ratings were based on first impressions of the children's faces from still photographs. The low correlation between children's self-rating of attractiveness and teachers' ratings

of attractiveness may offer support for Cavior's (1970) notion that young people may have inaccurate views of their own appearance, or may reflect a difference in the type of judgment made. Children were required to make a comparative judgment of their own attractiveness, whereas other raters were not asked to make comparative judgments but to judge each child in terms of absolute attractiveness.

A second explanation may be that attractive children tend to be perceived by teachers as academically bright, sociable, popular, confident, and possessing qualities of leadership. This explanation for the present findings cannot be ruled out because objective verification of the accuracy of teachers' judgments cannot be obtained from the data available.

A third explanation for the observed association between children's physical attractiveness and teachers' judgments may be the concomitant effect of other characteristics such as social class, the level of interest shown by parents, and personal characteristics of the child. With respect to sex differences, some interesting findings emerged from the present study. It is worth noting the teachers' systematic tendency to regard the girls as more attractive than the boys, a judgment not shared by the judges of the still photographs, by the interviewer, or indeed by the children themselves. Although the boys tended to agree with teachers' ratings of attractiveness, such agreement was not evident between teachers' and girls' ratings of attractiveness. Teachers also rated girls as significantly higher than boys in confidence, sociability, and academic brightness. These findings with respect to sex differences are in accord with Brophy and Good's (1974) conclusion that whenever a sex difference is discovered in teachers' ratings or expectations for boys and girls, the girls are rated higher than the boys.

In conclusion, there appeared to be reasonable agreement between teachers' ratings of children's physical attractiveness, judges' ratings of attractiveness, an interviewer's ratings, and children's self-ratings of attractiveness. Teachers' ratings of attractiveness were significantly correlated with their judgments of children's sociability, popularity, academic brightness, confidence, and qualities of leadership. Particularly noteworthy is the correlation between teachers' perceptions of physical attractiveness and their judgments of children's academic brightness. In addition, there appeared to be a systematic tendency by teachers to rate the girls higher than the boys both in attractiveness and in their other judgments of the children.

In describing the present findings we do not claim to offer support for the educational self-fulfilling prophecy effect, but the data demonstrate an association between teachers' judgments of physical attractiveness and their judgments of pupils' personal characteristics. The accuracy of the stereotypic associations of attractiveness reported here cannot be ascertained from the present data, nor do we attempt to speculate on whether the apparent prejudices against the unattractive children in this study will in any way

affect the teachers' behavior or determine the children's eventual behavior. We take note, however, of Brophy's (1983) comment that it is difficult to predict the effects of teachers' expectations, even with knowledge of their accuracy and of the degree of rigidity with which they are held.

REFERENCES

- Adams, G. R. (1978). Racial membership and physical attractiveness effects on pre-school teachers' expectations. *Child Study Journal*, 8, 29-41.
- Adams, G. R. (1982). Physical attractiveness. In A. G. Miller (Ed.), *In the eye of the beholder: Contemporary issues in stereotyping* (pp. 253-302). New York: Praeger.
- Adams, G. R., & Huston, T. L. (1975). Social perception of middle-aged persons varying in physical attractiveness. *Developmental Psychology*, 11, 657-658.
- Adams, G. R., & La Voie, J. C. (1974). The effect of student's sex, conduct and facial attractiveness on teacher expectancy. *Education*, 95, 76-83.
- Aloia, G. F. (1975). Effects of physical stigmata and labels on judgements of sub-normality by preservice teachers. *Mental Retardation*, 13, 17-21.
- Bar-Tal, D., & Saxe, L. (1976). Physical attractiveness and its relationship to sex-role stereotyping. *Sex Roles*, 2, 123-133.
- Berscheid, E. (1981). An overview of the psychological effects of physical attractiveness. In G. W. Luckier, K. A. Ribbens, & J. A. McNamara (Eds.), *Psychological aspects of facial form* (pp. 1-23). University of Michigan, Center for Human Growth and Development.
- Berscheid, E., & Walster, E. (1974). Physical attractiveness. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 7, pp. 157-215). New York: Academic Press.
- Blease, D. (1983). Teacher expectations and the self-fulfilling prophecy. *Educational Studies*, 9, 123-129.
- Braun, C. (1976). Teacher expectation: Sociopsychological dynamics. *Review of Educational Research*, 46, 185-213.
- Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75, 631-661.
- Brophy, J. E., & Good, T. (1974). *Teacher-student relationships: Causes and consequences*. New York: Holt, Rinehart & Winston.
- Cavior, N. (1970). *Physical attractiveness, perceived attitude similarity and interpersonal attraction among fifth and eleventh grade boys and girls*. Unpublished doctoral dissertation, University of Houston.
- Clifford, M. M. (1975). Physical attractiveness and academic performance. *Child Study Journal*, 5, 201-209.
- Clifford, M. M., & Walster, E. (1973). The effect of physical attractiveness on teacher expectations. *Sociology of Education*, 46, 248-258.
- Dion, K. (1972). Physical attractiveness and evaluation of children's transgressions. *Journal of Personality and Social Psychology*, 24, 207-213.
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24, 285-290.
- Doyle, W., Hancock, G., & Kifer, E. (1972). Teachers' perceptions: Do they make a difference? *Journal of the Association for the Study of Perception*, 7, 21-30.
- Elashoff, D. J., & Snow, R. (1971). *Pygmalion reconsidered*. Worthington, OH: Jones.

- Felson, R. B. (1980). Physical attractiveness, grades, and teachers' attributions of ability. *Representative Research in Social Psychology, 11*, 64-71.
- Gergen, K. J., & Gergen, M. M. (1981). *Social psychology*. New York: Harcourt Brace Jovanovich.
- Gregersen, E. (1982). *Sexual practices. The story of human sexuality*. London: Beazley.
- Kehle, T. J., Bramble, W. J., & Mason, E. J. (1974). Teachers' expectations: Ratings of student performances as biased by student characteristics. *Journal of Experimental Education, 43*, 54-60.
- La Voie, J. C., & Adams, G. R. (1974). Teacher expectancy and its relation to physical and interpersonal characteristics of the child. *Alberta Journal of Educational Research, 20*, 122-132.
- McCandless, B., Roberts, A., & Starnes, T. (1972). Teachers' marks, achievement test scores, and aptitude relations with respect to social class, race, and sex. *Journal of Educational Psychology, 63*, 153-159.
- Mendels, G. E., & Flanders, J. P. (1973). Teachers' expectations and pupil performance. *American Educational Research Journals, 10*, 203-212.
- Moser, C. A., & Kalton, G. (1979). *Survey methods in social investigation* (chap. 5). London: Heineman Educational Books.
- Palardy, J. (1969). What teachers believe—what children achieve. *Elementary School Journal, 69*, 370-374.
- Peck, R. (1971). *A cross-national comparison of sex and socio-economic differences in aptitude and achievement*. Paper presented at the annual meeting of the American Educational Research Association.
- Rich, J. (1975). Effects of children's physical attractiveness on teachers' evaluations. *Journal of Educational Psychology, 67*, 599-609.
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. New York: Holt, Rinehart, and Winston.
- Shaw, W. C., & Humphreys, S. (1982). Influence of children's dentofacial appearance on teacher expectations. *Community Dentistry & Oral Epidemiology, 10*, 313-319.
- Shaw, W. C., Ray, C., Frude, N., Addy, M., & Dummer, P. (1986). Dental and social effects of malocclusion and effectiveness of orthodontic treatment: A strategy for investigation. *Community Dentistry and Oral Epidemiology, 14*, 60-64.

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