

Facial and Full-Length Ratings of Attractiveness Related to the Social Interactions of Young Children

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The present study investigated the relationship between ratings of attractiveness based on facial and those based on full-length photographs and how these ratings are related to peer interaction in preschoolers. Aggressive and prosocial peer interactions were observed in 38 preschool-age children. Attractive girls received more prosocial and fewer aggressive advances than unattractive girls. There was no differential treatment of boys related to attractiveness. Results were discussed in relationship to possible developmental implications and their parallel to the adult literature.

Interest in the effects an individual's physical appearance has on others' perceptions and expectations of that individual has generated much research. Dion et al. (1972) coined the phrase "what is beautiful is good" to describe an apparent stereotype in which attractive individuals are viewed more positively than less attractive individuals on a number of characteristics. For example, when compared to unattractive individuals, attractive individuals are viewed as having more desirable personalities (Smits & Cherkoniah, 1976), as being more intelligent (Byrne et al., 1968), and as being less likely to behave antisocially (Miller et al., 1974). Although much of the research in this area has been conducted using adult populations, evidence suggests that children also have similar stereotypes related to attractiveness. For example, when rated by other children, attractive children are more likely to be chosen as potential friends (Dion,

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1973), are expected to behave more prosocially (Dion & Berscheid, 1974), are perceived to be smarter (Langlois & Stephan, 1977), and are judged to be more self-sufficient and independent (Dion & Berscheid, 1974) than their less attractive counterparts. However, physical attractiveness may not have the same degree of influence in all situations. Styczynski and Langlois (1977) found that acquaintance and gender may interact with attractiveness to influence behavioral expectations and popularity ratings.

While there is evidence that attractiveness plays a role in the perceptions and expectations children hold of their peers, few researchers have attempted to determine whether or not these perceptions and expectations are related to differential treatment of children by their peers. Exceptions to this include the work of Langlois and Downs (1979), who reported that dyads consisting of unattractive children were more aggressive than dyads consisting of attractive children; Trnavsky and Bakeman (1976), who reported that attractive children spent less time playing by themselves than unattractive children; and Dion and Stein (1978), who reported that attractive children were more successful than unattractive children in influence attempts directed toward opposite-sex peers. Because two of these studies investigated only dyadic interactions in a laboratory setting and the third was of a limited sample, the present investigation was undertaken primarily to determine through direct observation in a natural setting whether or not acquainted preschool-age children treat their peers differentially based on attractiveness. It was hypothesized that attractive children would be treated more prosocially and less aggressively than unattractive children. Additionally, based on the majority of rating studies, it was hypothesized that this effect would be found in the treatment of both boys and girls.

A second purpose of the present investigation was to determine whether or not the type of stimulus used in the ratings of attractiveness would affect those ratings and subsequently the conclusions drawn from those ratings. Most investigations into the effect of attractiveness have used ratings of facial photographs, often with all or most clothing cues removed, as their measure of attractiveness. However, when children interact they have not only facial cues to use in their evaluation of other individuals, but also cues that come from a full-length view of their peers, including posture, body type, height, and clothing. Previous reports suggest that some or all of these cues may influence individuals' perceptions and treatment of others. For example, Hilderbrandt (1982), in a recent review of the literature, concluded that body type has a significant influence on the perceptions and expectations of raters. Specifically, more positive traits are attributed to children of average build than to either chubby or thin children. Few researchers have attempted to directly assess differential treatment related

to body build. One noted exception is Lerner and his colleagues, who have reported that children distance themselves from, or give more space to, chubby peers than either average or normal peers when asked to place a picture of themselves on a felt board containing a picture of either an average, a chubby, or a thin peer (Iwawaki et al., 1977; Lerner, 1973; Lerner et al., 1975). Because of the possibility that earlier studies using only facial ratings of attractiveness may have been obtaining inaccurate relationships, both facial and full-length photographs were used in the assessment of attractiveness in the present study.

METHOD

Subjects

Subjects were 38 middle-class white children enrolled in two preschools located in a large Eastern city. The present sample consisted of 20 boys and 18 girls ranging in age from 2 years, 9 months, to 5 years, 7 months, with an average age of 4 years, 2 months. The children at the first preschool were observed during the third and fourth months of the school year; the children at the second preschool, during the sixth and seventh months. All children had been attending their preschool from the beginning of the school year.

Procedure

Each child was observed for a 5-min session on 5 separate days. Direct observation of each child's behavior was performed as unobtrusively as possible from within the classroom. The children were observed during free play, a time when they were allowed to choose with which toys or other children they would play. Teachers were present, but they tended to make relatively few directive comments.

Aggressive and prosocial behaviors which classmates directed toward each child were recorded. Behaviors were categorized according to a modification of a behavioral rating scale used by Abramovitch et al. (1978). Aggressive categories included physical aggression (hitting, pushing, kicking, biting), verbal aggression (verbal threat, insult, demand), and object struggle (a fight over an object). Prosocial categories included sharing, helping (providing verbal or physical aid), physical affection (hugging, kissing, holding hands, patting), and prosocial verbal comments

(statements of approval, praise, or consolation). Observers were trained until the obtained interrater reliability ratings ranged from .89 to .98 (mean = .94). Reliability ratings approximated these levels during subsequent reliability checks prior to beginning observations at the second preschool (mean = .95) and at the end of the investigation (mean = .91).

After the behavioral observations were completed two photographs of each child were taken. One photograph was taken of the child wearing casual clothing and standing in front of a standard gray backdrop. The other photograph was of the child from the shoulders up taken in front of the same gray backdrop with most of the clothing cues removed by the use of a plain gray smock. The photographs were presented via slides to college students who rated them on a nine-point scale of attractiveness. Two separate groups of 43 college students drawn from introductory psychology courses at Dickinson College were used to rate the full-length and the facial photographs. The mean full-length rating was 3.26 (SD = .8), and the mean facial rating was 4.44 (SD = 1.0). Reliability of the ratings was assessed using the Spearman Brown formula (Anastasi, 1968, p. 83), which resulted in reliability coefficients of .92 for full-length ratings and .90 for facial ratings.

RESULTS

The full-length and facial ratings of attractiveness were highly correlated in the present sample [$r(37) = .72, p < .001$]. This general result was obtained whether the ratings of just boys [$r(19) = .65, p < .001$] or just girls [$r(17) = .79, p < .001$] were considered.

Turning to the relationship between the observed treatment of subjects and their rated levels of attractiveness, a difference related to subjects' gender was found. In girls, but not in boys, attractiveness was positively correlated with the total number of prosocial behaviors directed toward a subject using either facial ratings [$r(17) = .73, p < .001$] or full-length rating of attractiveness [$r(17) = .56, p < .001$] for the analysis. Total aggression was not related to attractiveness in either gender in the present sample.

When individual categories of behavior were considered, significant relationships were again found only when behaviors directed toward girls were considered. Both facial and full-length ratings of attractiveness were positively correlated with the amount of sharing [$r(17) = .55, p < .01$, and $r(17) = .40, p < .05$, respectively] and prosocial verbal comments [$r(17) = .63, p < .01$, and $r(17) = .39, p < .05$, respectively] that were directed toward girls. In addition, the amount of physical aggression received by a girl was inversely related to her ratings of facial attractive-

ness [$r(17) = -.41, p < .05$], a relationship that approached significance with full-length ratings [$r(17) = -.35, p < .08$].

DISCUSSION

The present study investigated the relationship between the ratings of attractiveness based on facial and those based on full-length photographs and how these ratings may be related to the observed treatment of preschool-age children. The fact that full-length and facial ratings of attractiveness were highly correlated is important because it helps to substantiate the applicability of previous studies into the relationships between attractiveness and perceptions, expectations, and treatment, which traditionally relied solely on facial ratings of attractiveness.

The original hypothesis that attractive children would be shown preferential treatment by their peers was only partially supported. Attractive girls were treated preferentially compared to less attractive girls, however, in boys there was no relationship between level of attractiveness and observed treatment. The effect of attractiveness found in girls parallels the consistent findings of sociometric rating studies that attractive children are liked more than unattractive children (Dion, 1973; Dion & Berscheid, 1974; Langlois & Stephan, 1977). The finding of a differential effect of attractiveness related to gender is consistent with Langlois and Styczynski's (1979) report that children's sociometric choices are influenced by both the level of attractiveness and the gender of the target child. Specifically, they found that ratings of girls followed the "beauty-is-good" stereotype, with attractive girls being chosen as liked more and disliked less than unattractive girls. However, in boys the attractive were both liked and disliked more than the unattractive. The present finding that in girls differential treatment was related to attractiveness is consonant with Langlois and Styczynski's (1979) findings. The failure to find that attractiveness influenced differential treatment in boys may be the result of a confound between attractive boys being both liked and disliked more than unattractive boys. Several studies with adult subjects (e.g., Bar-Tal & Saxe, 1974; Krebs & Adinolfi, 1975; Miller, 1970) have also found a differential application of the attractiveness stereotype based on gender. In a review of this literature Bar-Tal and Saxe (1976) concluded that the beauty-is-good stereotype may be more stringently applied to females than males in our society. The present findings appear to be consistent with this conclusion.

The finding that the attractive-based differential treatment is applied only to girls in the present sample may have important developmental implications. The present findings suggest that within the preschoolers

tested the subtle message that is being conveyed is that a pretty face is requisite for a girl to receive preferential treatment. As a result of this message and their differential treatment girls of lower levels of attractiveness may develop negative self-perceptions very early in life. If these self-perceptions are translated into overt behaviors a vicious circle may ensue, with the attractive girls becoming the increasingly popular and social members of their group, while the less attractive become less social and lesser popular. In their study of dyadic interaction Langlois and Downs (1970) reported a developmental trend that supports this hypothesis. They found no difference in aggression related to attractiveness in 3 year olds, but in 5 year olds the unattractive were more aggressive than the attractive. It is plausible that because of repeated differential treatment the unattractive children may have developed a more aggressive style of interpersonal interaction.

In conclusion, attractiveness appears to have an important impact on the interpersonal behaviors of preschoolers which may affect future development. This impact in many ways parallels the observed behaviors, perceptions, and expectations of adults as reviewed by Bar-Tal and Saxe (1976). Specifically, the present sample of children appears to have internalized the adult standard that individuals are treated differently based on their level of attractiveness and that this standard of treatment is more stringently applied to females than males.

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