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Gender-biased Perceptions of Preschoolers' Behavior: How Much Is Aggression and Prosocial Behavior in the Eye of the Beholder?

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In this study we investigated the perceptions of male and female college students ($N = 208$) who evaluated preschoolers' actual aggressive and prosocial behavior, which was obtained from naturalistic observations and presented as detailed transcripts. Findings revealed that men were not as accurate as women were in identifying relational aggression and prosocial behavior. Coders were generally similar in their identification of physical and verbal aggression. This study suggests that gender biases and stereotypes exist in the evaluation of relational aggression and prosocial behavior, which included assessments of relational inclusion. Researchers must take precautionary steps to investigate and ameliorate the gender biases of potential informants, which, if not addressed, may lead to errors in a myriad of standard methodological instruments (e.g., observations, teacher reports, and survey designs) currently used by psychologists and relationship scholars.

KEY WORDS: gender bias; aggression; prosocial behavior; preschool children.

It has been posited that a clear advantage of observational methods is that they provide "... an objective view of child behavior that is unbiased by relationships with the child or other factors" (McNeilly-Choque, Hart, Robinson, Nelson, & Olsen, 1996, p. 51). But to what degree are untrained observers guided by social-cognitive gender biases that influence how they evaluate children's social behavior?

Past research reveals that untrained observers display gender biases when judging live behavior for overt physical aggression. When the gender of children is ambiguous and college students review aggressive behavior on videotapes, boy/boy dyads are considered less aggressive than girl/girl or mixed-gender interactions (Condry & Ross, 1985). Other studies with untrained college students have demonstrated that the actions of preschool boys toward preschool girls are often considered more intentional and deserving of more severe punishments than girls' behavior toward boys (Susser & Keating, 1990). In addition, past research has revealed that college students rely more on gender stereotypes when predicting children's current and future behaviors than do younger children (Berndt & Heller, 1986). Moreover, men and women college students have been shown to possess strong gender stereotypes and evaluative biases based on knowledge about gender of young children in experimental studies (Gurwtiz & Dodge, 1975). Past research on observer bias has also revealed that men tend to rate boys as more physically aggressive than girls, even when boys and girls are behaving in a comparable manner (Lyons & Serbin, 1986). Thus, even with a behavior as clear and nonsubtle as physical aggression, observers can

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be biased. On the basis of these past findings and the fact that college students are often used as observers, coders, and raters of social behavior in psychological research, college students were selected as our participants to investigate the presence of gender biases in the evaluations of preschool boys' and girls' actual social behaviors.

Past gender and observer bias research (e.g., Condry & Ross, 1985; Gurwtiz & Dodge, 1975; Kirch, 1999; Lyons & Serbin, 1986; Susser & Keating, 1990) has focused exclusively on physical aggression (e.g., kicking, hitting, threatening physical force), which is more common in boys (Coie & Dodge, 1998), and researchers have neglected other forms of aggression that may be more common in girls. Relational aggression, which is defined as the removal, or the threat of the removal, of a relationship as the means of harm (e.g., giving the silent treatment or ignoring a peer, excluding peers from play or activities, spreading malicious lies or gossip, Crick & Grotpeter, 1995) appears to be more frequent among girls and women across developmental periods (cf. Tomada & Schneider, 1997) and in particular more common among girls during early childhood (e.g., Bonica, Yeshova, Arnold, Fisher, & Zeljo, 2003; Crick, Casas, & Mosher, 1997; McNeilly-Choque et al., 1996; Ostrov & Keating, 2004; Ostrov, Woods, Jansen, Casas, & Crick, 2004; Russell, Hart, Robinson, & Olsen, 2003; Sebanc, 2003; cf. Hart, Nelson, Robinson, Olsen, & McNeilly-Choque, 1998). By investigating gender biases as they relate to both physical and relational aggression we will gain an understanding of college students' perceptions as they pertain to the salient social behavior of boys and girls during early childhood. This information can in turn be used to modify methods of study so that accurate and reliable data may be obtained from men and women informants (see Lyons & Serbin, 1986).

In order to maximize the ecological validity of the stimuli presented to coders in the current study, we investigated college students' gender-biased perceptions of preschoolers' aggressive and prosocial behavior by transforming *actual* observations during free play into detailed behavioral transcripts. To test the effects of knowledge of the gender of the children, participants either received the first version, which contained references to gender or a second set of transcripts that did not contain names or gender-related cues. College students were asked to code behaviors into social categories based on provided definitions, in a manner similar to procedures used by Ostrov and Keating (2004).

METHOD

Participants

Participants were 85 men and 123 women college students enrolled in a large, public university in an urban midwestern city. The students ranged in age from 17 to 23 years (Mean = 20.32 years; SD = 1.37), and most (63%) were European Americans (2% African American, 2% Asian American). Participants were given the opportunity to enter a raffle to receive movie theater gift certificates in the amount of $25. The interactions of preschool children (mean age = 64 months; SD = 6.77) that were used to generate the transcripts of behavior were obtained in two upstate New York preschools (for further details see Ostrov and Keating, 2004).

Materials

The transcripts were obtained from a previous naturalistic observational study with preschool children (Ostrov & Keating, 2004). In the previous study, 48 (24 girls, 24 boys) preschool children were observed on five separate occasions for 10 min each, using a focal child approach (Arsenio & Lover, 1997; Fagot & Hagan, 1985; Laursen & Hartup, 1989; Pellegrini, 1996), which consists of the observer focusing on one particular child and recording all relevant social behavior in full detail for each interval. Thus over the course of a 3-month period each child was observed for roughly 50 min. Men and women unfamiliar with the proposed hypotheses completed observations in which they recorded both the behaviors (e.g., aggressive, prosocial) that were displayed to other children and those that were received from the children's peers (e.g., victimization and received prosocial behavior). Various subtypes of aggression were coded (i.e., physical, relational, and verbal), all of which are intended to hurt or harm another (Coie & Dodge, 1998; Crick & Grotpeter, 1995). Relational aggression was defined as any behavior in which the relationship or friendship was the vehicle of harm, including various verbal and nonverbal behaviors (e.g., excluding a peer from play activities; maliciously telling gossip, lies, or secrets to harm others; ignoring or giving others the silent treatment, threatening the removal of the relationship; Crick & Grotpeter, 1995). Physical aggression included behaviors that used physical force or the threat of force as the means of harm (e.g., hitting, kicking, punching, pushing, and

pinching; Coie & Dodge, 1998; Crick & Grotpeter, 1995). Verbal aggression included hurtful behaviors that did not involve threatening the removal of the relationship but that used verbal means to harm (e.g., mean names, verbal insults; Crick et al., 1999). The prosocial behavior category included such actions as helping, sharing, complimenting, and relational inclusion, defined as including others in activities or events (Greener & Crick, 1999). Observers recorded the gender of the focal child and victims in all interactions. The observational method has demonstrated acceptable psychometric properties (i.e., concurrent and predictive validity, interobserver and test-retest reliability; see Crick, Ostrov, Appleyard, Jansen, & Casas, 2004; Ostrov & Keating, 2004; Ostrov et al., 2004).

Selection of Transcripts

In order to provide a relatively comprehensive and valence-balanced (i.e., both positive and negative) assessment of coders' perceptions of young children's behavior, we randomly selected 10 exemplars from the reliably coded observation forms that represent each of the four main behavioral categories of interest (i.e., physical, verbal, relational aggression, prosocial behavior) to produce a total of 40 items. Enough information was provided to capture the essence of the interaction (e.g., physical aggression: "A child punched a peer in the stomach"; relational aggression: A child said to a peer, "You are not allowed, this is our corner, you are not playing with us, no way!"). The first version contained no direct references to the children's gender and simply referred to the children as the "child" and a "peer." The second version consisted of the same 40 interactions, but also contained a gendered name for the "child" and the "peer" that corresponded to the sex of the child in the original preschool study. Both same-sex and cross-sex interactions were included given past recommendations to include both situations to avoid possible sex of target confounds (see Susser & Keating, 1990).

Procedure

Participants were asked to read each behavioral interaction in the transcript and indicate which was the most appropriate category: physical aggression, relational aggression, verbal aggression, or prosocial behavior. This study was conducted using a between-subjects design; that is, each participant read only one set of transcripts (i.e., with or without gendered labels), which were randomly assigned. Past researchers have used this methodology in order to decrease the chance that participants would identify the true purpose of the task and change their responses accordingly (Gallivan, 1991; Gurwtiz & Dodge, 1975). Definitions and examples based on past research (Crick & Grotpeter, 1995) and equivalent to the information provided to the original observers were provided on a separate sheet to which the participants could refer throughout the study. Transcripts were individually administered in university settings to participants by a trained female experimenter, and sessions lasted approximately 15–20 min. Participants were fully debriefed at the end of the session.

Coding of Transcripts

Each college student participant received a score from 0 to 10 to indicate the degree of correct responses they provided out of 10 for each of the four behavioral subtypes (physical, relational, verbal aggression, prosocial behavior). Thus, the outcome measure for this study was based on how accurate the participants were in classifying the transcript for each of the four behavioral subtypes. Correct item ratings were based on both the original reliable observers' codes and subsequent agreement with the first author. "Other" selections, when present, were counted as incorrect responses.

RESULTS

The transcripts in this study were analyzed by gender to see how men and women differed in their ratings of preschoolers' behavior on each behavioral subtype. The dependent variable for all analyses was the accuracy score the men and women received on each of the behavioral categories.

To test for gender differences in ratings for each behavior type, a 2 (gender of college student coder) $\times$ 2 (form type: gender label or no gender label) $\times$ 4 (behavior type: physical aggression, verbal aggression, relational aggression, prosocial behavior) ANOVA with repeated measures was conducted. The ANOVA yielded a significant main effect for behavior type, $F(3, 204) = 101.00$, $p < .001$. Post

hoc tests ($p < .05$) indicated that in general coders received the highest scores on prosocial behavior ($M = 9.11$; $SD = 0.79$), followed by physical ($M = 8.73$; $SD = 1.16$), relational ($M = 7.08$; $SD = 1.58$), and verbal aggression items ($M = 5.68$; $SD = 1.93$), which were all significantly ($p < .05$) lower than the preceding behaviors. The ANOVA also yielded a significant two-way interaction between behavior type and gender, $F(3, 204) = 6.43, p < .05$. No other main effects or interactions were significant.

The two-way interaction was further investigated with a series of one-way ANOVAs with each separate behavior category serving as the dependent measure. For evaluations of relational aggression, the one-way ANOVA revealed that men ($M = 6.28$, $SD = 1.71$) were more often incorrect than women were ($M = 7.88$, $SD = 1.45$), $F(1, 207) = 7.29$, $p < .01$. For physical aggression, the one-way ANOVA did not reveal any significant differences between the evaluations of men ($M = 8.85$, $SD = 0.95$) and women ($M = 8.60$, $SD = 1.36$), $F(1, 207) = 0.09$, *ns*. For verbal aggression, the one-way ANOVA did not reveal any significant differences between men ($M = 5.66, SD = 1.84$) and women coders ($M = 5.69$, $SD = 2.02$), $F(1, 207) = 0.07$, *ns*. For prosocial behavior, the one-way ANOVA did reveal a significant difference, which indicated that in general men were less correct ($M = 8.55, SD = 0.82$) than women were ($M = 9.66, SD = 0.75$), $F(1, 207) = 4.39, p < .05$.

DISCUSSION

The general findings of this study, which suggest that men are not as adept at identifying relational aggression and prosocial behavior as are women, are consistent with past literature. Previously it has been argued that the covert nature of relational aggression makes it more difficult for those not directly involved in the activity to be aware of its presence (Crick, Bigbee, & Howes, 1996; Crick & Grotpeter, 1995). For instance, Crick et al. (1996) found that girls and boys tended to agree on the normative forms of aggression among male peers, but not among female peers. The authors speculated that relationally aggressive acts may be less visible to the male peer group, and boys may have an egocentric perspective bias that limits their cognitive ability to recognize different aggressive norms (Crick et al., 1996). Similarly, prosocial behavior, such as inclusion in activities and subtle forms of sharing and reciprocity, may also go unnoticed by boys, especially in interactions with girls (Greener & Crick, 1999). This potential for lack of exposure to these behaviors may influence the manner in which individuals are likely to identify these behaviors correctly when they are presented in a context-free manner. It seems that those who arguably have more experience with the behavior are primed for the recognition of these behaviors. This interpretation is consistent with theory and research that suggests that gender segregated peer groups, and friendships play a significant role in the socialization process throughout development (Maccoby, 1998).

Information concerning the sex of the children did not increase rates of bias. It is possible that these effects did not emerge because the simple manipulation of labels (e.g., children's names) may not have been enough to elicit the social-cognitive bias effects that have been documented in the past (Condry & Ross, 1985). Additional subtle cues of gender (e.g., clothing, hairstyle, body movements), which were not incorporated in the present study, may have been more appropriate to elicit biased perceptions in judgments of acts of aggression and prosocial behavior for girls and boys (Susser & Keating, 1990).

Researchers have speculated that those with the most experience with children (e.g., teachers) may have stronger gender biases than do adults who do not have this high level of exposure (Condry & Ross, 1985; Lyons & Serbin, 1986), and, thus, future researchers should investigate how experience with children (i.e., teachers' and parents' experience) affects perceptions of physical and relational aggression, as well as prosocial behavior. This is a crucial area of investigation because teachers and parents are often used as informants in the study of aggression, victimization, and social–psychological adjustment (see Crick et al., 1999, 2004). Finally, culture, ethnicity, and contextual variables directly affect child rearing, perceptions, and socialization processes (Super & Harkness, 1986). Therefore, future researchers should use the present approach to investigate cultural and ethnic biases for physical and relational aggression evaluations among male and female coders.

In conclusion, the present findings provide initial evidence that some men have gender-biased perceptions of boys' and girls' relationally aggressive and prosocial behavior during early childhood. Researchers must take precautionary steps to investigate observer biases and other stereotypes of potential informants, which may exaggerate existing behavioral differences or mask the true nature of the social phenomena one is assessing in developmental

research (Lyons & Serbin, 1986). It is crucial that we also consider the developmental basis for these biases if we are to understand how they can affect evaluations of children's performance. That is, we must continue to investigate how positive and negative experiences in same-sex peer groups during childhood may influence how individuals think, interact, and behave as adolescents and adults (Maccoby, 1998). Future researchers should continue to focus their attention on the development and validation of bias free methods and work to find strategies to ameliorate these social-cognitive biases.

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