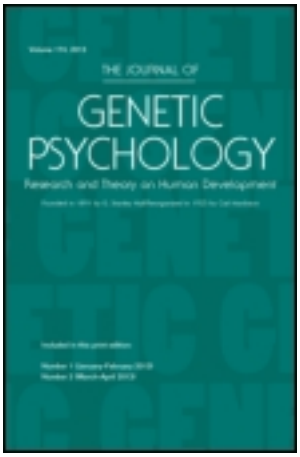

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Children's Trait and Emotion Attributions in Socially Ambiguous and Unambiguous Situations

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ABSTRACT. Children's attributions about story characters in ambiguous and unambiguous social situations were assessed. One hundred and forty-four 6–7-year-olds and 10–11-year-olds heard about actors who slighted a recipient intentionally or for an undetermined reason and then made causal attributions about the events, an emotion attribution about the recipient, and global personality attributions about the actors and recipient. Relations between perceived self-competence and attribution style were also assessed. Participants were more likely to make negative causal attributions in the unambiguous condition and with increasing age. Older girls and younger boys were more likely than other groups to attribute negative emotions to the recipient. Overall, participants perceived recipients positively and actors negatively. Perceived self-competence was positively correlated with actor attributions, although these differed by age and gender. Implications for children's psychosocial adjustment are discussed.

Keywords: elementary school-aged children, emotion attribution, personality judgments, social attribution

The Social Information Processing model (SIP; Crick & Dodge, 1994; Dodge, 1986) is highly influential in the study of children's social cognition and relationships (see Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). The SIP model describes cognitive processes involved in social interactions and their contribution to individual differences in attribution style. According to Crick and Dodge, children who encounter a social situation must navigate successfully

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several steps of information processing to engage in competent interactions (e.g., encoding of situational cues, representation and interpretation of cues, clarification of goals, construction of a response, and enactment of behavior). A breakdown in information processing can result in maladaptive social interaction styles wherein children attribute malicious intent to others and often engage in inappropriate retaliatory responses (e.g., Dodge, McClaskey, & Feldman, 1985). Appropriate processing of social information, then, is key to children's success in social interactions and to psychosocial competence in general.

In this study, we focused on the knowledge structures that children bring to bear on their interpretation of hypothetical, ambiguous social situations. Researchers have noted that the way in which children interpret social events depends not only on aspects of online processing that occur when a child experiences social situations directly, but also their general representations about social interactions (e.g., Burks, Laird, Dodge, Pettit, & Bates, 1999), particularly in the context of ambiguous social events. For example, children who have been rebuffed by peers in the past may be more likely to assume that a hypothetical ambiguous behavior (e.g., a peer walking past another peer without saying hello) is intentionally negative. This kind of baseline assumption may perpetuate negative retaliatory behaviors when such situations arise in everyday life.

Of interest here were two aspects of children's reasoning about ambiguous and unambiguous hypothetical social situations: emotion attributions and global personality attributions. Our decision to focus on personality attribution was based on the paucity of systematic research on personality attributions in ambiguous social situations. Indeed, the majority of research has focused instead on intent attributions (Crick & Dodge, 1996; Dodge, 1980). For example, participants are typically asked whether one character intended to harm another, how characters feel, or what they might do if they were a particular character (e.g., Dorsch & Keane, 1994; Pettit, Dodge, & Brown, 1988). Moreover, because personality attribution was not the focus of the studies in which trait questions were posed, these studies did not assess the full range of attributions. Dodge and Price (1994) asked participants "how mean" the actors were, but did not allow for both positive and negative trait attributions. Lochman and Dodge (1994) asked whether actors were being mean, not being mean, or whether it was hard to tell (see also Dodge et al., 2003). In other studies (e.g., Bosacki & Astington, 1999), participants were asked open-ended questions to get a sense of complexity of personality judgments about any character rather than perpetrators and victims in the stories. Notably, separate assessment of children's understanding of personality and intentions is essential given that children often respond differently to questions that assess each of these attribution types (e.g., Heyman & Gelman, 1998).

Given that children begin to make basic personality attributions about others in early to middle childhood (e.g., Heyman & Gelman, 1999) and in light

of the prevalence of personality attribution as an organizing construct for interpreting others' actions and mental states (e.g., Yuill, 1993), it is important to understand this aspect of social information processing in the age groups of interest. We were interested in whether children would differentiate their personality attributions about story characters in ambiguous versus unambiguous negative social situations and also whether children might give the benefit of the doubt in their personality attributions of the characters. Indeed, previous research indicates that, in early to middle childhood, some children exhibit a positivity bias in their personality judgments (e.g., Boseovski, 2010) and this bias may be adaptive to psychosocial functioning (see Bjorklund, 1997). It is possible that making a benign attribution or giving others the benefit of the doubt when information is ambiguous is an important aspect of normative development that encourages positive interpersonal relations (e.g., Nelson & Crick, 1999; Runions & Keating, 2007). Finally, Arsenio and Lemerise (2004) highlighted the need to integrate models of moral development with SIP and an examination of personality attributions (i.e., niceness–meanness) takes a step in this direction. Given previous findings that children's expectations for mean or aggressive behavior differ by gender (Giles & Heyman, 2005), we were also interested in potential gender differences in personality attribution.

The second goal of this study was to examine the type and complexity of emotion attributions made by children about characters in socially ambiguous and unambiguous situations. The impetus for examining emotion stems from Lemerise and Arsenio (2000), who emphasized its importance in the encoding aspect of the SIP model (e.g., Arsenio, 2010; Arsenio & Lemerise, 2004). There is a large body of research on emotion regulation and emotionality in relation to children's social competence (e.g., Eisenberg & Fabes, 1992; Eisenberg et al., 2009). In contrast, there is less research on the variation in children's emotion attributions in settings in which there are no concrete answers (Eivers, Brendgen, & Borge, 2010). In one of few such studies, Eivers et al. gave first-grade students social entry scenarios (new child at school attempts group entry) and negative event scenarios (a boy whose Lego house was broken by peers). Participants made emotion attributions about the characters at the time of the event, afterward, and predicted what would happen in the future. Although the majority of children predicted positive outcomes in both scenarios, their predictions were integrated with their emotion attributions at the end of the story (e.g., that a negative outcome would result in negative emotions) and they also exhibited an understanding of temporal change in emotion states. In a study with preadolescents, Bosacki and Astington (1999) examined emotion attributions about ambiguous situations (e.g., child entering a new school) and found that a more sophisticated understanding of emotions was associated with greater nominations of social competence by peers (e.g., in hypothesizing whether a particular child would be effective at helping a peer with a problem).

Given the potential importance of emotion understanding in children's social perceptions and social competence, we extend previous research by examining emotion attributions by both younger and older children (6- and 7-year-olds and 10- and 11-year-olds) in ambiguous and unambiguous social situations. Using the mental state reasoning framework used by Bosacki and Astington (1999), we examined the complexity of emotion processing and the valence of the attributions (i.e., positive, negative, or neutral) as a function of condition. Given previous research findings of gender differences in emotion understanding that girls generally outperform boys (e.g., Bosacki, 2007; Brown & Dunn, 1996; Cutting & Dunn, 1999; Hughes & Dunn, 1998), we assessed potential gender differences in emotion attribution.

Our final goal was to conduct a preliminary investigation of the relation between children's personality attributions and their own self-concept or personal view of their psychosocial attributes (see Shevlin, Adamson, & Collins, 2003), as this has not been addressed in extant literature. In particular, we examined whether higher perceived self-competence is related specifically to a tendency to exhibit greater positivity in personality judgments (i.e., benign or positive rather than negative attributions about others in ambiguous and unambiguous situations). Our rationale for this investigation was based on previous research indicating that some children judge both themselves and others favorably in social and academic domains despite little or lack of relevant evidence (for a review, see Boseovski, 2010). Thus, we reasoned that children with a high self-concept in this study would be more likely to give the benefit of the doubt to story characters. Our expectations were also based on research that indicates that self-concept is related to children's theory of mind or mental state reasoning skills, which are also required for personality attribution (Heyman & Gelman, 1998). Bosacki (2000) examined the relation between self-understanding (a component of the self-concept) and theory of mind, or mental state reasoning skills, in preadolescents. Self-understanding was assessed via interviews in which children were asked to explain in detail why they felt competent or incompetent in various domains, while theory of mind was assessed by asking participants to reason about ambiguous social events. For example, in one story scenario two boys who are team captains wink at each other and then choose a third boy to be on their team. Participants were asked to explain this behavior and responses were coded according to the type of language used, ranging from superficial, behavioral descriptions to more complex mental state reasoning that took into account the feelings of the third boy. Findings indicated that there was a strong positive correlation between these theory of mind skills and children's self-understanding, suggesting that the ability to understand different perspectives develops hand in hand with self-understanding and self-awareness (Bosacki, 2000). Further, Bosacki also reported a positive correlation between self-concept and theory of mind skills for boys on the behavioral scale of Harter's (1982) Self Perception Profile for Children (SPPC). Finally, recent

longitudinal research indicates that agreeableness and empathic self-efficacy, or the confidence in one's capacity to empathize with others, contribute to prosocial behavior in adolescence (Caprara, Alessandri, Di Giunta, Panerai, & Eisenberg, 2010).

In this study, we were interested specifically in the relation between children's self-concept and their personality attributions rather than causal attributions. Indeed, in comparison to the research described above in which a much more thorough measure of self-understanding was obtained, the present study was not designed to answer this question. We also did not seek to examine the relation between self-concept and emotion attributions, as we expected children in this typically developing group to be generally sympathetic to the recipient's feelings overall. Consistent with previous research that has emphasized aspects of the self-concept as distinct (Bosacki, 2000), we sought to examine the relation between actor and recipient personality attributions and perceived physical competence, behavioral competence, and global self-worth separately. Also, given previous findings of gender differences in theory of mind and self-concept (Bosacki, 2000) and evidence of a heightened positivity bias in middle than late childhood (Boseovski & Lee, 2006), we examined this relationship separately by age and gender.

In sum, we examined 6–7-year-olds' and 10–11-year-olds' causal, emotion, and trait attributions about story characters in socially ambiguous and unambiguous (negative) conditions. We assessed condition, age, and gender differences in valence (positive, neutral, or negative) and complexity of these attributions. Finally, we examined the relation between children's perceived self-competence and trait attributions about the story characters. Given evidence of a positivity bias in middle childhood, we expected younger children to make more positive causal attributions about the events and more positive personality attributions about the actors and recipients than older children. We also expected that complexity of attributions would increase with age and that girls would make more complex causal and emotion attributions than boys (see Bosacki, 2000). Finally, based on the research discussed previously, we expected that positive self-perceptions would be associated with positive actor and recipient attributions. As research has not examined the links between personality attributions and perceived self-competence, we did not have specific predictions regarding gender.

Method

Participants

There were 144 participants, with 72 6–7-year-olds ($M = 84.50$ months, $SD = 6.70$ months; 34 boys), and 72 10–11-year-olds ($M = 132.04$ months, $SD = 7.70$ months; 34 boys) recruited as part of a study on social cognition.

Participants were tested in a child development laboratory or in schools in a mid-sized North American city. Participants were of mixed ethnic and racial identity: 74.3% Caucasian, 7.6% African American, 2.8% Latino–Hispanic, and 8.3% who classified themselves as mixed. An additional 5.6% did not report on this variable. The majority of families were from upper middle–class backgrounds.

Materials

The social situation tasks and dependent measures were adapted from Bosacki and Astington (1999) and Boseovski and Lee (2006). There were laminated line drawings of boy and girl actors. Children completed an 18-item version of the SPPC.

Design and Procedure

Participants from each age group were assigned randomly to an ambiguous or unambiguous story condition, with 36 participants per story type per age group. All participants received the SPPC after completing the social tasks. Children were seated at a table with the experimenter in a quiet room for a session lasting approximately 20 min. After children were familiarized with the experimenter, the story was presented with accompanying illustrations. To ensure that participants remembered the characters' identity, the experimenter pointed to characters as they were referenced. Children heard about actors and recipients of their own gender. The stories differed according to the condition to which the participant was assigned.

Unambiguous social story. Using the female stories as an example (see male stories in Appendix A), participants were told the following:

> This is Alice. This is Mary. Alice and Mary are talking and laughing together. They have been best friends all year. Brenda also goes to their school and when she walks up to Alice and Mary to talk, they do not speak to her *on purpose*. Instead, they continue to talk even though she is standing there. Then they walk past Brenda and Brenda is left standing alone in the hall.

Afterward, participants were shown an illustration that depicted the characters and asked a series of questions. Comprehension questions were asked to ensure that children could identify each character and follow the story. No child failed the comprehension after having been told the story twice. After labeling the characters successfully, children were asked to tell the experimenter what happened in the story.

Next, participants were asked for a general causal explanation of the scenario, specifically, "Why didn't [actors] speak to [recipient]?" To assess emotion understanding of the recipient, they were also asked "How does [recipient] feel

standing alone and what is he or she saying/thinking to him or herself?" Personality attribution questions assessed participants' impressions of both the actors and the recipient: "What kind of boy/girl is [recipient]?" and "What kind of boys/girls are [actors]?" For actors and recipients, this was followed up with "Are they nice, mean or not nice or mean?" Only the order of the nice and mean options was randomized, whereas the not nice or mean option was always presented last.

Ambiguous social story. The ambiguous story was almost identical to the unambiguous story and matched for length. The major difference was that no reason or intention information was given to explain why the actors did not speak to the recipient so that there were potential positive or benign explanations (e.g., actors did not see recipient; actors felt shy about talking to a new person) and potential negative explanations (e.g., actors do not want to include her on purpose, actors do not like new kids at school) of behavior. Thus, participants had to infer the reason that the actors disregarded the recipient:

> This is Kelly. This is Susan. Kelly and Susan are talking and laughing together. They have been best friends all year. Leslie is new at school and when she walks up to Kelly and Susan to talk, they do not speak to her. Instead, they continue to talk as though they do not see her. Then, they walk past Leslie and Leslie is left standing alone in the hall.

Afterward, participants were asked the same set of questions as those in the unambiguous story.

Harter SPPC. After the story, participants completed the behavioral conduct, physical self-perception, and global self-worth scales of the Harter SPPC, which can be summed to create a total self-competence score (see Appendix B). They were told

> Now, you get to answer some questions about yourself. This sheet of paper has sentences that describe what different people are like. There are no right or wrong answers to these questions; your answers just tell us what you are like as a person.

Children were asked whether they wanted to read the questions on their own or have the experimenter administer the questions. For those children who decided to fill out the questionnaire independently, the experimenter remained present to answer any questions and ensure that they could intervene if children expressed difficulties with the questions. Children were told that they had to decide which of two sentences described them better. Once they picked an item, they had to decide if that item was "really true" about them or only "sort of true" about them.

Data coding. For all measures except the trait questions, which involved minimal verbal responses, a single rater coded the data fully. A second rater who was

blind to study hypotheses coded a random subset (20%) of data independently to assess interrater reliability. The raters were in agreement over 98% of the time and conflicts were resolved through discussion.

Children's response to "Why didn't [actors] talk to [recipient]?" was coded for negative content (exclusion based on negative assumptions about the recipient; e.g., "They heard a rumor about her that they didn't like"), neutral content (define as exclusion for benign reasons; e.g., "They don't know her") and positive content (defined as unintentional exclusion; e.g., "They just didn't see her"). Participants received a score of -1 for negative content, 0 for neutral content and $+1$ for positive content ($\kappa = 0.93$). Participants who did not respond or who answered "don't know" were excluded from analyses. Next, we analyzed the complexity of the responses to this question using the scale devised by Bosacki and Astington (see Appendix C; $\kappa = 1.00$).

Children were asked "How does [recipient] feel standing alone and what is he or she thinking?" and these responses were also coded for negative content (e.g., "Sad ... no one likes me"), neutral content (e.g., "It's hard to make friends"), and positive content (e.g., "Ok ... I should ask nicely to join in") with the same scoring as described previously ($\kappa = 1.00$). Response complexity was coded in the manner described previously.

For both the actor and recipient trait questions, participants were asked, "What kind of boy/girl is [recipient]? Is he/she nice, mean or not nice or mean?" Participants received a score of 0 for saying mean and 1 for saying nice or not nice or mean.

Results

General Causal Attributions for Ambiguous and Unambiguous Stories

The first analysis assessed general causal attributions about the story events, "Why didn't [actors] talk to [recipient]? Data from one participant who said "I don't know" were not included in the analysis. A 2 (Age: 6–7 years vs. 10–11 years) $\times$ 2 (Condition: ambiguous vs. unambiguous) $\times$ 2 (Gender: male or female) between-subjects analysis of variance (ANOVA) indicated that older children's responses contained more negative content than younger children $F(1, 135) = 5.41$, $p = .02$; that responses contained more negative content in the unambiguous than ambiguous condition, $F(1, 135) = 9.79$, $p = .002$; and that girls' responses contained more negative content than boys' responses, $F(1, 135) = 5.30$, $p = .02$, model $R^2 = .162$. There were no significant interactions, Fs < 2, ps $> .10$. Table 1 presents the means by age, gender, and condition.

Older children made more complex assessments ($M = 1.74$, $SD = 0.44$) than younger children ($M = 1.54$, $SD = 0.53$), $F(1, 134) = 5.98$, $p = .016$. Responses were marginally significantly more complex in the unambiguous than ambiguous condition, $F(1, 134) = 3.33$, $p = .07$; and girls' responses were significantly more

TABLE 1. Mean Causal Ratings and Standard Deviations for "Why Didn't [Actors] Talk to [Recipient]?"

	Girls				Boys			
	6–7 years old		10–11 years old		6–7 years old		10–11 years old	
Story type	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Ambiguous	−0.35	0.61	−0.53	0.52	−0.21	0.53	−0.24	0.54
Unambiguous	−0.65	0.59	−0.78	0.42	−0.27	0.59‘	−0.77	0.44

Note. Positive responses were coded as +1, negative as –1, and neutral as 0.

complex ($M = 1.74$, $SD = 0.46$) than boys' responses ($M = 1.54$ $SD = 0.50$), $F(1, 134) = 4.86$, $p = .029$, model $R^2 = .112$. There were no significant interactions, Fs < 1, ps $> .10$.

Emotion Attributions in Ambiguous and Unambiguous Stories

Children were asked "How does [recipient] feel standing alone and what is he or she thinking?" Data from 33 participants (six younger boys, 11 younger girls, seven older boys, and nine older girls) who did not respond were not analyzed. Chi-square analyses indicated that responses did not differ by age or gender, $\chi^2 < 2.40$, $p > .10$. A 2 (Age: 6–7 years vs. 10–11 years) × 2 (Condition: ambiguous vs. unambiguous) × 2 (Gender: male or female) between-subjects ANOVA revealed an age by gender interaction, $F(1, 111) = 8.33$, $p = .005$. Younger boys and older girls were more likely to report that the recipient had negative feelings as compared to older boys and younger girls. The means for each group were the following: younger boys, $M = -0.71$, $SD = 0.46$; older girls, $M = -0.79$, $SD = 0.41$; older boys, $M = -0.52$, $SD = 0.49$; younger girls, $M = -0.48$, $SD = 0.57$. There were no other significant main effects or interactions, Fs < 1.1, ps $> .10$, model $R^2 = .09$. Analysis of response complexity was not conducted, as every child in the sample achieved level 3 psychological story explanations (see Appendix C).

Trait Attributions for Ambiguous and Unambiguous Stories

Analyses were conducted on attributions about the actors and recipient. Children were asked "What kind of boy/girl is [recipient]? Is he/she nice, mean or not nice or mean?" Only one younger boy did not respond to this question. Over 50% of the participants gave a spontaneous answer that captured niceness (nice,

good, sweet). For the follow-up forced choice question, results indicated that 98.7% of the participants described the recipient as nice or neutral (not nice or mean). Further analyses were not conducted. Participants were also asked, "What kind of boys/girls are [actors]? Are they nice, mean or not nice or mean?" Data from four participants (two younger boys and two younger girls) who responded "don't know" or who answered incoherently were not analyzed. Over 50% of participants gave a spontaneous answer that capture meanness (e.g., mean, bad, rude). For the follow-up forced choice question, participants received a score of 0 for saying mean and 1 for saying nice or not nice or mean. The majority of participants responded that the actors were mean, although a 2 (Age: 6–7 years vs. 10–11 years) × 2 (Condition: ambiguous vs. unambiguous) × 2 (Gender: male or female) between-subjects ANOVA revealed that younger children were significantly more likely than older children to choose mean, $F(1, 140) = 7.49$, $p = .007$. The means for the younger and older children were 0.13 ($SD = 0.34$) and 0.33 ($SD = 0.47$), respectively. There were no other significant main effects or interactions, Fs < 2, ps $> .10$, model $R^2 = .075$.

Performance on Harter SPPC

Means and standard deviations on the subscales of the Harter SPPC are shown in Table 2. A series of 2 (Age: 6–7 years vs. 10–11 years) × 2 (Condition: ambiguous vs. unambiguous) × 2 (Gender: male or female) between-subjects ANOVAs examined differences in children's total self-competence score. There was a significant effect of age, with younger children scoring higher than older children, $F(1, 136) = 5.27$, $p = .018$. The mean for the younger children was

TABLE 2. Means (and Standard Deviations) on Each Subscale of the Harter Self-Perception Profile for Children

	Girls				Boys			
	6–7 years old		10–11 years old		6–7 years old		10–11 years old	
Subscale	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Physical	20.63	3.58	18.82	4.15	20.25	4.36	19.35	3.14
Behavioral	20.37	3.84	19.55	4.70	19.56	3.92	16.74	4.22
Global self-worth	21.11	3.01	21.34	2.96	21.09	3.25	19.94	3.58
Total self-perception	62.11	7.72	59.71	8.39	60.88	9.12	56.03	9.06

Note. The highest possible score on each subscale was 24. The highest possible total score was 72.

61.53 ($SD = 8.47$), while the mean for older children was 57.97 (SD = 8.84). Also, girls had marginally higher scores than boys, $F(1, 136) = 3.18$, $p = .07$, with a mean of 60.91 ($SD = 9.34$) as compared to 58.46 ($SD = 9.34$). There were no significant interactions, Fs < 1, $p > .10$.

Correlations Between Self-Concept and Actor Attributions

The correlations of interest concerned the relation between performance on the Harter SPPC and the personality attribution about the story actors and recipients. Because the recipient attributions were almost uniformly positive as described above, we did not compute correlations for this variable and instead focused only on the actor attributions. Given the disparate findings by age group in the analyses above and consistent with previous research, bivariate Pearson correlations were computed by each age and gender to assess the relation between children's responses to the personality question and performance on the Harter SPPC subscale. For the 6- and 7-year-old girls, attributions were significantly positively correlated with behavioral conduct, $r(36) = .389$, $p = .02$, and with the total self-competence score $r(36) = .358$, $p = .03$; other correlations were not significant. For the 10- and 11-year-old girls, attributions were associated marginally with global self-worth, $r(38) = .295$ $p = .07$ and with the total self-competence score, $r(38) = .36$, $p = .026$. For the 6- and 7-year-old boys, there were marginally significant positive correlations between attributions and behavioral conduct, $r(32) = .335$ $p = .06$, and total self-competence, $r(38) = .335$ $p = .06$. For the 10- and 11-year-old boys, none of the correlations between attributions and the Harter scales were significant.

Discussion

The purpose of this study was to examine emotion and global personality attributions in children's social information processing in ambiguous and unambiguous situations. We also examined gender differences in the complexity and types of responses across stories. Finally, we assessed the relation between children's perceived self-competence and their trait attributions.

Children's Causal Attributions About Ambiguous and Unambiguous Story Events

As expected, causal attributions differed based on ambiguity level. Participants made more negative causal attributions about the actors' behavior when it was clearly intentional, but were reluctant to do so when actors' intentions were not explicit. This finding is consistent with research indicating that normative samples of children are sensitive to others' intentions and less likely than clinical samples, such as children with oppositional defiant disorder, to make negative

causal attributions about others' actions (e.g., Webster-Stratton & Lindsay, 1999). Although the ability to make the distinction between intentional and unintentional actions is critical for maintaining positive peer relations (see Choi & Kim, 2003), older children were more likely than younger children to report that the actors excluded the recipient intentionally across conditions. Indeed, some of these children introduced several negative assumptions about the recipient that were not based on the story evidence presented (e.g., she was weird or not cool). This type of response may reflect an increased sensitivity to context and increased skepticism in social perceptions with age (see Heyman, Fu, & Lee, 2007). Specifically, while young children exhibit a positivity bias in their social judgments that peaks in middle childhood (Boseovski, 2010), this attenuates somewhat by 10 or 11 years of age (e.g., Heyman, Gee, & Giles, 2003). However, this response could also be taken as a sign that these children were trying to generate reasonable justifications for the actors' behavior rather than making negative assumptions about them.

It is important to note that the finding that girls made more negative causal attributions than boys may be due to the nature of the scenarios, which were perhaps more likely to evoke the relationally aggressive responses that are more typical of girls (see Crick, 1995). The story content may also have elicited differential attributions in girls than boys. Specifically, the male actors' lack of response to the recipient may have been attributed by participants as preoccupation with the video game. In contrast, it is more difficult to explain why the female actors, who were simply talking to one another, ignored the recipient.

Personality and Emotion Attributions About the Story Characters

Across age, gender, and irrespective of whether the actors' behavior was ambiguous or unambiguous, participants almost invariably perceived the recipient as a victim rather than inferring that that he or she provoked actors' negative behavior. The majority of children described the recipient as nice, consistent with research in which children were reluctant to blame a victim for multiple transgressions that were committed against him or her (e.g., Boseovski & Lee, 2008). This finding may reflect a tendency to empathize with the victim that is indicative of general anti-bullying sentiments that are expressed by children (e.g., Rigby & Slee, 1991).

Contrary to expectation, children did not vary their personality label for the actors based on the level of ambiguity of the negative action, as the majority of participants labeled them as mean. Moreover, this effect was more pronounced for the younger children and is in contrast to previous research indicating that younger children often show a positivity bias in personality attribution and behavioral explanation (e.g., Boseovski & Lee, 2006; Runions & Keating, 2007). However, it is unclear whether the use of the label mean reflected stable trait attributions about the actors or simply a description of transient behavior. It is also possible that children in the present study perceived the behaviors as negative because

they involved multiple potential perpetrators rather than situations involving only a single actor and recipient as in previous research. Finally, the present study used exemplars of behavioral exclusion, which may have been more negatively salient than the behaviors described in previous research (e.g., taking toys from a recipient; Boseovski & Lee, 2006).

These data extend present knowledge about SIP by providing information about the nature of children's personality attributions in ambiguous and unambiguous situations, which have not been examined systematically. While performance in this sample was fairly uniform, there are likely to be individual differences in perceived stability of such behaviors, particularly in vulnerable samples of children. These perceptions may play an important role in children's social success. For example, children who decide in haste that peers who rebuff them are mean people may be less likely to deal with their peers effectively in the future as compared to those who simply judge them as mean in the moment.

Consistent with their impressions of the recipient as a victim, the majority of children rated the emotions of the recipient as negative rather than neutral or positive, regardless of whether the actions experienced were ambiguous or unambiguous. These descriptions centered mainly on the recipient's negative thoughts and feelings about the self. Notably, older girls and younger boys were especially sensitive to the thoughts and feelings of the recipient. For the older girls, this pattern may reflect the stereotypic feminization of emotion understanding that occurs in early adolescence (see Maccoby, 1998). This greater empathic response in 9- and 10-year-old girls as compared to boys was also found by Warden and MacKinnon (2003). In contrast, older boys sometimes receive explicit messages that emotional displays are undesirable (e.g., from their fathers; see Klimes-Dougan et al., 2007), while younger boys may be protected from these influences. This notion is consistent with the finding that boys are perceived to peak in emotionality by the elementary school years, after which a decrease is noted into adolescence (Fabes & Martin, 1991).

Notably, the empathic response by younger boys toward the victim may be perceived as contradictory to their causal attributions about actors. Indeed, in comparison to older boys, these participants made fewer negative causal attributions about the actors' behavior. One potential explanation for this pattern of performance is that this group had difficulty generating appropriate causal attributions. Research indicates that boys are less likely than girls to use validating justifications, such as causal explanations for behavior, in their conversations with peers (Kyratsis, Ross, & Koymen, 2010). This interpretation is also consistent with the present finding that these children showed lower complexity in their responses than both girls and older boys. Despite heightened empathy in these two groups, there was an overall tendency toward empathy for the victim by the majority of children, which is consistent with their attribution of the victim as nice. This pattern of response may be particularly important for prosocial behavior. Children

who are characterized as aggressive may lack the ability to empathize with victims, although this varies as a function of subtype of aggression (see Arsenio & Lemerise, 2001).

Complexity of Ratings by Story, Question, and Gender

As expected, children's responses grew increasingly complex with age. Overall, younger children were more likely to focus on behavioral or situational explanations, while older children were focused on psychological explanations, consistent with improvements that are typically seen in mental state reasoning over the elementary school years (see Mull & Evans, 2010). The only exception was for the complexity of the emotion responses, which generated uniformly psychological responses across all children. This finding is unsurprising given that the question itself cued participants specifically toward the thoughts and feelings of the recipient. In the same vein, attributions were more complex in unambiguous condition, perhaps because the ambiguous stories naturally prompted emphasis on the context (e.g., recipient was new), while the unambiguous stories could not be explained readily by facts and therefore resulted in more mental state attributions (e.g., dislike of the recipient).

Finally, the finding that girls' causal attributions about the story event were more complex than boys' causal attributions is consistent with previous findings of more sophisticated perspective-taking abilities in girls (see Bosacki & Astington, 1999). Clearly, when children in this study were not cued to discuss psychological explanations (i.e., were simply asked to generate a cause), girls tended to give such explanations spontaneously.

Relation Between Perceived Self-Competence and Actor Attributions

Preliminary support was obtained for the notion that neutral or positive trait attributions about the actors were associated with higher perceived self-competence and that negative trait attributions were associated with lower perceived self-competence. As in previous research (Bosacki, 2000), the association was particularly strong for the behavioral conduct subscale: The more well-behaved children perceived themselves to be, the more likely they were to give the actors the benefit of the doubt. These data cannot tell us whether children who exhibit this pattern actually behave this way in daily life, nor do they inform us about the direction of this relationship. It is possible that children who perceive themselves as behaving positively toward others receive favorable treatment from those individuals, which in turn leads them to make positive attributions about people around them. However, it also possible that making positive attributions about others in itself drives a higher level of perceived self-competence. In turn, those who see themselves negatively may feel less competent or evoke negative treatment from others that subsequently feeds into their attributions.

Notably, links between perceived self-competence and positive or neutral attributions were particularly strong for younger children, as only trends emerged for older girls and no significant correlations were obtained for the older boys. Although speculative, perhaps the strong tendency of younger children to engage in overt social comparisons (see Pomerantz, Ruble, Frey, & Greulich, 1995) fuels a focus on the self that prompts children to behave in ways that are consistent with their self-perceptions. This tendency may dissipate somewhat by early adolescence. Clearly, additional research is needed to understand the nature of the link between perceived self-competence and personality attribution, given that it may have important implications for children's psychosocial adjustment.

Summary, Limitations, and Future Directions

Elementary school-aged children differentiated their causal explanations of events in ambiguous and unambiguous negative social situations, although older children were more likely to be skeptical about the recipient than younger children. In contrast, the majority of participants described actors as mean across the ambiguous and unambiguous conditions, although it is unclear whether these labels reflected crystallized traits or a mere summary of behavior. Notably, a tendency toward benign or positive rather than negative attributions was associated with a higher level of perceived self-competence, particularly for younger children. In contrast, a tendency toward negative attributions was associated with lower perceived self-competence. Overall, participants were largely sympathetic to the victim's emotions.

There are some limitations in this work that could be addressed in future research. In the present study, we used only a single story to assess children's attributions about ambiguous and unambiguous situations. As mentioned previously, these stories are limited in that they tended to focus on relational themes and were arguably not fully equivalent across genders. Thus, in future research, it will be important to include a variety of story types to assess more thoroughly the nature of children's causal, emotion, and trait attributions. Also, in the present study, we scored children in the same manner irrespective of whether they gave spontaneous or forced-choice responses for the trait attributions. It would be more informative to conduct a fine-grained analysis of children's trait attributions in the future to determine the extent to which these might be differentially related to perceived self-concept and children's causal and emotion attributions. For example, it is possible that the provision of only three options resulted in biased responding for those children who did not answer spontaneously.

One promising direction for future research is to examine personality labeling more thoroughly to determine whether the attributions made here were transient or stable. This could be achieved by asking participants to make predictions about characters' future behavior. It may also be useful to assess a variety of trait attributions, rather than focusing solely on niceness or meanness. For example,

future researchers could assess children's attributions about the intelligence of the actors and recipients in relation to their interpretation of the story events. It is also important to assess the links between specific personality attributions and their association with children's real-world social skills. For those children who show a tendency to make premature judgments about others that lead to difficulties in peer relations, social skills training programs could focus on helping them to weigh the evidence carefully before making firm judgments about others. As well, direct interventions that are designed to improve children's self-perceptions may encourage positive views of other individuals, which may in turn have a beneficial impact on peer relations.

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APPENDIX A

Male Stories

Ambiguous Story

This is Mark. This is Kenny. Mark and Kenny are playing a video game together, laughing and talking about the game. They have been best friends all year. Scott is new to the school and when he walks up to Mark and Kenny to play and talk about the game, they do not speak to him. Instead, they continue to talk as though they do not see him. Then,

when they finish the game, Mark and Kenny walk past Scott and Scott is left standing alone in the hall.

Unambiguous Story

This is Tommy. This is Chris. Tommy and Chris are playing a video game together, laughing and talking about the game. They have been best friends all year. Robert also goes to their school and when he walks up to Tommy and Chris to play and talk about the game, they do not speak to him on purpose. Instead, they continue to talk even though he is standing there. Then, when they finish the game, Tommy and Chris walk past Robert and Robert is left standing alone in the hall.

APPENDIX B

Harter Self Perception Profile for Children

1. Some kids are happy with the way they look, but other kids are not happy with the way they look.
2. Some kids often do not like the way they behave but other kids usually like the way they behave.
3. Some kids often unhappy with themselves but other kids are pretty pleased with themselves.
4. Some kids are happy with their height and weight but other kids wish their height or weight were different.
5. Some kids usually do things that are right but other kids often do things that are wrong.
6. Some kids don't like their life but other kids do like their life.
7. Some kids wish their body was different but other kids like their body the way it is.
8. Some kids usually act the way they know they are supposed to but other kids often don't act the way they are supposed to.
9. Some kids are happy with themselves as a person but other kids are often not happy with themselves.
10. Some kids wish they looked different but other kids like the way the look.
11. Some kids usually get in trouble because of things they do but other kids usually don't do things that get them in trouble.
12. Some kids like the kind of person they are but other kids often wish they were someone else.
13. Some kids wish something about their face or hair looked different but other kids like their face and hair the way they are.
14. Some kids do things they know they shouldn't do but other kids hardly ever do things they know they shouldn't do.
15. Some kids are very happy being the way they are but other kids wish they were different.
16. Some kids think that they are good looking but other kids think that they are not very good looking.
17. Some kids behave themselves very well but other kids often find it hard to behave themselves.
18. Some kids are not very happy with the way they do a lot of things but other kids think the way they do things is fine.

APPENDIX C

Complexity Coding Scheme for Causal and Emotion Attributions

Tangential Responses

For both causal and emotion attributions, responses were coded as Tangential if participants stated "I don't know" or responded incoherently.

Situational Behavioral Responses

Responses included references to story facts, physical characteristics, and other character attributes or descriptions. For example: "They didn't see her" (causal); "She was pushed away and excluded" (emotion).

Psychological Responses

Responses included references to mental states such as knowledge, thoughts, feeling, and desires. For example: "They know a rumor about her" (causal); "She thinks that they don't like her" (emotion).

Integrated Psychological Responses

Responses included an integration of a psychological response (emotion, desire), as well as reference to personal or self-relevant experience. For example: "They didn't want a new friend . . . not everyone wants to be your friend" (causal); "I think she felt sad, because if I got ignored I would feel sad" (emotion).