"Only You Can Play with Me!" Children's Inclusive Decision-Making, Reasoning, and Emotions Based on Peers' Gender and Behavior Problems

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Abstract

This study examined the development of children's decisions, reasoning, and emotions in contexts of peer inclusion/exclusion. We asked an ethnically-diverse sample of 117 children ages 4 (n = 59; 60% girls) and 8 (n = 58; 49% girls) to choose between including hypothetical peers of the same or opposite gender, and with or without attention deficit hyperactivity problems and aggressive behavior. Children also provided justifications for, and emotions associated with, their inclusion decisions. Both 4- and 8-year-olds predominantly chose to include the in-group peer (i.e., the same gender peer and peers without behavior problems), thus demonstrating a normative in-group inclusive bias. Nevertheless, children included the out-group peer more in the gender context than behavior problems contexts. The majority of children reported group functioning-, group identity-, and stereotype-related reasoning after their in-group inclusion decisions, and associated happy feelings with such decisions. Although most children attributed sadness to excluded out-group peers, they attributed more anger to the excluded out-group peer in the aggression context compared to other contexts. We discuss the implications of our findings for current theorizing about children's social-cognitive and emotional development in contexts of peer inclusion and exclusion.

Keywords: peer inclusion, peer exclusion, social decision-making, reasoning, emotions

"Only You Can Play with Me!" Children's Inclusive Decision-Making, Reasoning, and Emotions Based on Peers' Gender and Behavior Problems

Peer exclusion is common among children (Fanger, Frankel, & Hazen, 2012) and has been linked to increased prejudice, discrimination, and negative mental health outcomes (Juvonen & Gross, 2005). Chronic perpetrators of peer exclusion are at risk of developing negative social interactions into adulthood. On the other hand, chronic victims of exclusion are prone to developing aggressive behavior problems (Killen & Malti, 2015). In an attempt to prevent or decrease these negative consequences for both excluders and excluded children, developmental researchers have aimed to better understand the motives behind peer exclusion by examining children's reasoning and emotions following acts of exclusion based on various categories, such as gender, ethnicity/race, and personality characteristics (e.g., Killen & Rutland, 2011; Malti, Killen, & Gasser, 2012). Yet, one child's exclusion is often the product of another child's inclusion (e.g., when there is only room for one to join a group/activity); thus speaking to the importance of examining both children's intentional inclusive and exclusive behavior. Despite a plethora of work on peer exclusion, children's decision-making regarding peer inclusion (vs. exclusion) has been less studied.

In the present study, we investigated children's inclusive decision-making, reasoning, and emotions. We focused on contexts of gender (a well-studied and common issue in children's social decision-making; Gillen-O'Neel, Ruble, & Fuligni, 2011; Killen, & Stangor, 2001) and behavior problems (understudied, yet common issues in children's classrooms and peer groups; Whitley, & Gooderham, 2015). We chose to explore these questions in a sample of 4- and 8-year-olds because of the increasing importance of peer group dynamics from early to middle

childhood (Nesdale & Dalton, 2011). During the preschool and early school years, children also show a dramatic improvement in social understanding (e.g., theory-of-mind; Killen, Mulvey, Richardson, Jampol, & Woodward, 2011) and the capacity to coordinate affective and cognitive processes (see research on the happy victimizer phenomenon; Malti & Ongley, 2014). They also begin forming intergroup attitudes and biases (Rutland & Killen, 2015) during this age period, which thus offers a window into understanding developmental changes in children's judgments regarding inclusion, and associated reasoning and emotions.

Development of Decision-Making and Reasoning in Contexts of Peer Inclusion/Exclusion

Children's social decision-making is based, in part, on their identification with one peer group over another and their preconceived notions about the characteristics of in- and out-group peers (Killen, Elenbaas, & Rutland, 2015). From early childhood, children label themselves as belonging to groups that reflect their self-concepts and characteristics (Harter, 2012). Children use this knowledge to make decisions regarding whom to include/exclude. These categorizations can lead to in-group biases, budding stereotypes and prejudices (Abrams, Rutland, & Cameron, 2003), and acts of social exclusion (Abrams, Hogg, & Marques, 2005).

Previous work has suggested that the way children judge and make decisions about inclusion/exclusion changes as a function of age. That is, with development, the salience of various components of a situation shifts and, as a result, children may judge exclusion and accompanying group norms differently. For example, Killen and Stangor (2001) found that 7-, 10-, and 13-year-olds judged stereotype-based exclusion to be wrong; however, 13-year-olds were more likely to permit exclusion when factors such as merit and group functioning were threatened. Thus, this study suggests that although children may understand and judge exclusion

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to be wrong, their judgements and decision-making may be swayed by other pertinent factors.

Another predominant factor in children's peer inclusion/exclusion is their reasoning in contexts of social decision-making. Research has shown that such reasoning can be categorized into three domains: a) moral (e.g., issues of fairness, justice, and the welfare of others), b) socialconventional (e.g., group functioning and identity, and societal customs), and c) psychological (e.g., personal choice and freedom; Killen & Rutland, 2011). Deciding whom to include/exclude in everyday life typically requires the coordination of multiple and sometimes all three of these domains (Killen & Malti, 2015). For example, choosing between a girl and a boy for a baseball game may require the balancing of social-conventional and moral norms (e.g., societal stereotypes of boys being better than girls at sports versus internalized concerns of gender equality). By the age of 3, children are already able to distinguish between and coordinate at least some of these domains (Richardson, Mulvey, & Killen, 2012). With development, reasoning in contexts of peer inclusion/exclusion evolves alongside children's perceived importance of norms within each domain. For example, 13-year-olds deem weight-based exclusion more acceptable than 9-year-olds do because of the increased importance placed on social conventional norms of group functioning and popularity between late childhood and adolescence (Nguyen & Malti, 2014). Thus, children appear to shift the importance they attribute to norms within the three domains, increasingly emphasizing group functioning when reasoning about inclusion/exclusion.

To date, the majority of studies have focused on differences in social decision-making and reasoning between late childhood and adolescence, by which time children have already developed strong bonds with peer groups (Harter, 2012). In comparison, relatively little research

has focused on early to middle childhood—a period when peer groups and accompanying norms of inclusion/exclusion are only beginning to form (Vandell, Nenide, & Van Winkle, 2006).

Development of Emotions in Contexts of Peer Inclusion/Exclusion

Emotions promote adherence (or lack there of) to social and moral standards—as such, they are important components of behavior (Malti & Noam, 2016). In contexts of moral transgression, for example, feeling guilt or sympathy after a transgression may motivate prosocial behaviors like reparation and helping (Malti, 2016), whereas feeling happiness or pride may promote antisocial, aggressive acts (Malti & Ongley, 2014). Although children typically report negative feelings following hypothetical acts of transgression, it has been repeatedly demonstrated that children in early childhood display the "happy victimizer effect" (Arsenio, 2014), which is characterized by the attribution of positive emotions to hypothetical victimizers. Beyond 6 or 7 years of age, children increasingly anticipate negative emotions, such as sadness and guilt following moral transgressions (Arsenio, 2014). These developmental differences have also been found in contexts of exclusion: Gasser, Malti, and Buholzer (2014) found that 12-yearolds—compared to 6- and 9-year-olds—attributed more negative emotions to a hypothetical peer who excluded a child with a disability. In some cases, however, children and adolescents attribute both positive and negative emotions to excluders (Chilver-Stainer, Gasser, & Perrig-Chiello, 2014; Malti et al., 2012). This emotional ambivalence likely reflects the competing norms and concerns that arise in multifaceted contexts of peer inclusion/exclusion

Much of the work in this area has focused on how *excluders* feel after exclusion, but less is known about how children understand the emotional repercussions of exclusion on *excluded* peers. Children's emotion attributions to excluded peers can tell us about their understanding of,

and sympathy for, the welfare of excluded children. Some evidence indicates that children primarily attribute negative emotions—typically sadness and anger—to peers they hypothetically exclude, acknowledging the negative consequences of their exclusive behavior (e.g., Malti et al., 2012). Interestingly, different types of negatively valenced emotions, such as sadness versus anger, may spur differential avoidance- versus approach-related responses in excluded individuals (e.g., withdrawal versus retaliation, respectively). Thus, investigating children's emotional understanding of includes/excluders and excluded others may provide further insight into the motivating factors behind exclusion.

Context Differences in Decision-Making, Reasoning, and Emotions Following Peer Inclusion/Exclusion

Children's inclusive/exclusive decision-making, reasoning, and emotions depend on context characteristics, such as intergroup categories and individual differences (e.g., gender, race/ethnicity, nationality, temperament, physical characteristics; Gasser et al., 2013; Killen & Stangor, 2001; Møller & Tenenbaum, 2011). Developmental researchers have been particularly interested in gender-based inclusion/exclusion (Killen et al., 2011; Mulvey & Killen, 2014) because gender differences in behavioral realms such as play and peer relations are wide-spread and emerge early in development (Blakemore, Berenbaum, & Liben, 2009).

In addition to gender, other intergroup characteristics, such as behavioral dispositions, are likely to influence children's social decision-making. Research on homophily suggests that children's friendships and social networks remain alike in features ranging from demographic variables to psychological and behavioral characteristics (Nangle, Erdley, Zeff, Stanchfield, & Gold, 2004). For instance, children with aggressive behavioral tendencies are more likely to

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make a friendship connection with peers who are similar to them, thus forming a peer group that holds antisocial behavioral characteristics at the root of group membership (Piehler & Dishion, 2007). Thus, children are likely to use behavioral characteristics to form group membership categories and may be more likely to exclude those who do not fit the behavior profile of the group.

Despite the importance of behavioral characteristics for children's peer group formation, behavior problems such as attention deficit hyperactivity disorder (ADHD) and aggression symptoms have received less attention in the literature on peer inclusion/exclusion. A few related studies indicate that aggressive peers are more likely to be evaluated negatively and rejected (Hoza, 2007), and less likely to be helped by other children (Barnett, Sonnentag, Livengood, Struble, & Wadian, 2012). Indeed, one study by Park and Killen (2010) has shown that 10- and 13-year-olds tend to exclude an aggressive peer more than an opposite gender peer when the group is collaborating and working toward a goal, due to expected disruptions from the aggressive peer. However, the sample was composed of children in late childhood and adolescents and the researchers combined group functioning and stereotype justifications when examining reasoning for exclusion; thus, it remains unclear whether young children exclude aggressive others to preserve group functioning or due to discriminatory attitudes.

ADHD is also viewed negatively and children with ADHD are characterized by unfavorable traits (e.g., crazy, careless; Law, Sinclair, & Fraser, 2007). Indeed, a recent study by Gasser, Gruetter, Torchetti, and Buholzer (2017) found that children in the fifth and sixth grades were more likely to exclude hypothetical hyperactive peers than low-achieving peers for reasons of group functioning, suggesting that children view their peers with ADHD-related behavior

problems as intentionally disruptive. On the other hand, although children view hyperactive behavior as intentional and controllable (Smith & Williams, 2001), it is possible that they may be less likely to exclude peers with ADHD compared to aggressive children if they regard ADHD symptoms as less serious, or even entertaining. Given that ADHD and aggression are highly stigmatized (Hinshaw & Stier, 2008; Lau et al., 2016) and among the most common behavior problems in childhood (Whitley, & Gooderham, 2015), understanding how and why peers displaying these behaviors are included/excluded may help to address and decrease stigma.

The Present Study

We investigated children's inclusive decision-making and accompanying reasoning and emotions, as well as the emotions they attributed to excluded peers. Our first aim was to examine children's inclusion decisions across three contexts: 1) gender, 2) ADHD-related behavior problems, and 3) aggression-related behavior problems. In line with previous research documenting the early development of social categorization (e.g., Bennett & Sani, 2008) and ingroup biases (Killen et al., 2015), we hypothesized that children would include in-group peers (i.e., peers with the same gender and absence of behavior problems) more frequently than outgroup peers (i.e., peers with the opposite gender and presence of behavior problems). We did not expect to find age differences in inclusion decisions because gender is a salient, well-established social category from early on (Killen & Rutland, 2011) and due to children's early negative views of hyperactive and aggressive children (Hoza, 2007). However, we did expect children to include out-group members more frequently in the gender context compared to the ADHD and aggression contexts because children with behavior problems likely pose a greater threat to the group compared to those of the opposite gender (Park & Killen, 2010).

Second, we examined children's reasoning for their decisions across the three contexts. We expected inclusion of the same gender peer to be predominantly justified by reasons of group identity because gender is one of the first defining features that children understand about themselves (Turner & Brown, 2007). We also expected some stereotype reasoning because of previous work suggesting increased use of stereotype justification for same-gender member inclusion with age (Killen et al., 2015). Based on previous research highlighting the importance children place on group functioning (e.g., Gasser et al., 2017; Rutland, Killen, & Abrams, 2010), and the stigmatization and disruptiveness attached to aggression and ADHD (Bell, Long, Garvan, & Bussing, 2011), we predicted that children would primarily use stereotype- and group functioning-based reasoning to justify their inclusion of children without behavior problems. We did not have specific developmental hypotheses regarding use of these various types of reasoning due to the lack of previous research.

Third, we investigated children's *own* anticipated emotions following inclusion decisions and emotions attributed to excluded out-group peers. We expected children to primarily feel happy about their decisions to include in-group peers (e.g., see Barnett et al., 2012). Based on previous research documenting a developmental increase in negative emotions after excluding (see Malti et al., 2017), we hypothesized that 8-year-olds would report less positive and more negative emotions than 4-year-olds after including the in-group peer (and thereby excluding the out-group peer). Given children's well-established understanding of others' desires by early childhood (Thompson & Lagattuta, 2006), we also expected that all children would understand the negative emotional consequences for the excluded out-group peer and therefore attribute negative emotions to them regardless of context (see Gasser et al., 2013). However, we assumed

that attributions of anger would be particularly high for the excluded aggressive peer because such children are often plagued by anger problems (Lochman, Barry, Powell, & Young, 2010).

In line with previous studies, we controlled for children's gender and socioeconomic status (SES) in all multivariate analysis.

Method

Participants

A sample of 117 4-year-olds (n = 59; $M_{age} = 4.70$, SD = 0.47; 60% girls) and 8-year-olds (n = 58; $M_{age} = 7.97$, SD = 0.40; 49% girls) from a major Canadian city participated alongside their caregivers. Families were ethnically diverse, originating from Western Europe (32%), Latin, Central, and South America (15%), Eastern Europe (13%), Asia (10%), Africa (3%), and multiple/other origins (23%); 4% chose not to report. As an approximation of SES, caregivers were asked to report their highest level of education completed—the majority were university graduates (39%), followed by postgraduate (34%), college (16%), and high school graduates (7%); 4% chose not to report. These distributions were representative of the community in which the study took place (Statistics Canada, 2013). Children and caregivers were fluent in spoken and written English.

Procedure

The study was approved by the Research Ethics Board of the researchers' institution. Participating families visited the research laboratory for a single 30-minute testing session, which was conducted by trained undergraduate psychology students. Informed written consent was obtained from caregivers and children provided oral assent prior to study commencement. Children were shown videos of gender- and age-matched puppets with varying characteristics,

after which they were asked a series of questions. During that time, caregivers completed a questionnaire to collect demographic information in a waiting area.

Measures

Social Decision-Making and Emotion Task: Design and Assessment Overview. The study employed a within-participant design: Each child completed the Social Decision-Making and Emotion Task (a modification of a well-validated peer exclusion task; citation withheld for peer review). We adapted the task by adding new contexts (i.e., behavior problems contexts), and by asking children to choose between including two peers rather than presenting them with exclusion scenarios where the decision to include/exclude had already been made. The task had three components: 1) an inclusion decision, 2) reasoning following the decision, and 3) emotion following the decision and emotion attribution to the excluded peer.

Video vignettes. Children were shown three videos of gender- and age-matched puppets enacting different scenarios (see Appendix). The first context involved choosing between a peer of the same or opposite gender to join a gender-themed birthday party. The second and third videos involved choosing between a peer with or without behavior problems (i.e., ADHD symptoms and aggression, respectively) to join a group-oriented task. Specifically, the child with ADHD symptoms was fidgeting and distracting, whereas the child with aggressive behavior softly pushed another peer. All scenarios were developed based on previous research (citation withheld for peer review) and piloted to ensure content, developmental, and clinical appropriateness. The ADHD and aggression vignettes depicted key symptoms of the DSM-5, but were presented in a medium range of severity to align with our focus on a community sample of children. A prompting question was asked to ensure that all children understood the behaviors

displayed in the video vignettes. For example, in the ADHD video vignette, the prompting question read as follows: "In the video, did you notice that [out-group member] fidgeted a lot and was constantly moving around? He does not sit still and has trouble paying attention to the game. Did you notice that [in-group member] sits still, remains in the same spot at the table, and pays attention to the game?"). This was a within-participants design; all children participated in all three conditions and the presentation of the three conditions was randomized.

Inclusion decision, reasoning, and emotions. After each video, children were asked to choose between including one of the two peers—in-group versus out-group—(e.g., "If this was your party, who would you invite: Sarah or Michael?") They were then asked for the reasoning for their decision (e.g., "Why would you pick Sarah/Michael?) Finally, children were asked how they would feel about their inclusion decision (e.g., "How would you feel if you were [protagonist] and chose [Sarah/Michael] to come to the party?") and how the excluded peer would feel (e.g., "How would you feel if you were [out-group member]?").

Coding for inclusion decision. Choosing the in-group member (i.e., same gender peer/peers without aggression and ADHD symptoms) was coded as 1 (in-group inclusion), whereas choosing the out-group member (i.e., opposite gender peer/peers with aggression and ADHD symptoms) was coded as 0 (out-group inclusion). Because the sample was a community sample, hypothetical peers without ADHD and without aggression were considered part of the in-group. This is further justified by parent-ratings of their children's ADHD and aggressive behavior using items from the Child Behavior Checklist (Achenach & Rescorla, 2000, 2001). Indeed, the mean levels of ADHD symptomatology (M = 2.54 for 4- and 8-year-olds) and

aggressive behavior were low (M = 2.54 for 4-year-olds and M = 2.03 for 8-year-olds, on a scale from 1 to 6).

Coding for reasoning. Reasoning coding followed a well-validated system adapted from previous peer exclusion research (citations withheld for peer review). There were five categories: moral, group identity, group functioning, stereotypes, and counterfactual (see Table 1 for descriptions of each category and prototypical examples). Two research assistants independently coded a random subsample of responses (i.e., 20%; $\kappa = 0.95$). Disagreements were discussed and the consensus category was used for final coding. Data were then binary coded for each category (i.e., 1 = presence of reasoning, 0 = absence of reasoning) to be used in later analyses. Because a significant number of children reported up to two lines of reasoning (i.e., 21% of the time on average across stories), we included both lines of reasoning in our analyses. The moral, counterfactual, and undifferentiated categories occurred infrequently (< 5%) across contexts; thus, they were not considered in the analyses.

Coding for emotions. Coding of inclusion emotions and emotion attributions to excluded peers also followed a well-validated scheme from previous research (citation withheld for peer review). Specifically, emotions fell into the following categories: happy, neutral, sad, angry, scared, anxious, guilty, sorry, embarrassed, and disgusted. Two different research assistants independently coded a random subsample of responses (i.e., 20%; κ = 0.88). Disagreements were discussed and the consensus category was used for final coding. Emotions were then binary coded (i.e., 1 = presence of emotion, 0 = absence of emotion). Since few children reported/attributed more than one emotion (< 9%) and we were interested in their spontaneous emotional reactions, we only used the first reported emotion in analyses. Furthermore, since the

neutral and "other" emotion categories occurred infrequently (< 5%) across contexts, they were not considered in the analyses.

Data analytic strategy. First, we examined the frequencies (%) for inclusion decisions, reasoning, and emotions by context and age. Missing value percentages for variables ranged from 0% to 9%, and we used pair-wise deletion to minimize the loss of cases (Peugh & Enders, 2004). We then ran a series of repeated-measures binomial logistic regressions with context (gender context as a reference value versus ADHD and versus aggression), age group (4- versus 8-year-olds), and context x age group interactions as categorical predictors, and inclusive decisions, reasoning, and emotions variables as binary-coded outcomes. Child gender and SES were entered as covariates. To ease the interpretability of findings and maintain model parsimony, we dropped non-significant interactions (Cohen, Cohen, West, & Aiken, 2003). When necessary, we conducted follow-up, pair-wise binomial logistic regressions to explore context differences.

Results

Inclusion Decisions

Regardless of age, children primarily chose to include the in-group peer (86%). The main effect of context was significant, Wald χ^2 (2) = 27.59, p < .001, as children were more likely to include the out-group versus in-group peer in the gender context compared to the ADHD context, b = -1.69, SE = .43, z = -3.93, p < .001, OR = .18, and aggression context, b = -2.19, SE = .49, z = -4.47, p < .001, OR = .11 (see Figure 1).

Reasoning Following Inclusion Decisions

Next, we examined whether children used different types of reasoning for inclusive decisions across contexts and age groups (see Table 2). Eighteen percent of children used group identity reasoning, which differed across contexts, Wald $\chi^2(2) = 52.68$, p < .001, and age, Wald $\chi^2(1) = 4.13$, p < .05. Specifically, children were more likely to use group identity reasoning in the gender context compared to the aggression context, b = 4.56, SE = .85, z = 5.36, p < .001, OR = 95.6, and ADHD context, b = 4.55, SE = .78, z = 5.83, p < .001, OR = 94.6. In addition, 4-year-olds were more likely to use group identity reasoning than 8-year-olds, b = .92, SE = .45, z = 2.04, p < .01, OR = 2.51.

Thirty-six percent of the children reported group functioning reasoning for including an in-group peer, which was only present in the behavior problems contexts. The main effect of context, Wald $\chi^2(2) = 25.55$, p < .001, revealed that children were more likely to use group functioning reasoning in the ADHD context than aggression context, b = 2.55, SE = .47, z = 5.43, p < .01, OR = 12.81. However, the interaction of context x age, Wald $\chi^2(2) = 7.45$, p < .05, showed that 8-year-olds reported more group functioning reasoning than 4-year-olds in the ADHD context, whereas 4-year-olds reported more group functioning reasoning than 8-year-olds in the aggression context, b = 1.78, SE = .65, z = 2.74, p < .01, OR = 5.70.

In addition, 33% of children who included the in-group peer used stereotype reasoning. There was a main effect of context, Wald $\chi^2(2) = 55.65$, p < .001, as well as a significant interaction of age x context, Wald $\chi^2(2) = 7.99$, p < .05, revealing that children used more stereotype reasoning in the aggression context than the gender and ADHD contexts, b = 2.99, SE = .57, z = 5.25, p < .001, OR = 19.89 and b = 2.37, SE = .51, z = 4.65, p < .001, OR = 10.70, respectively. Four-year-olds used more stereotype reasoning than 8-year-olds in the gender

context, whereas 8-year-olds used more stereotype reasoning than 4-year-olds in the aggression context, b = 1.74, SE = .72, z = 2.42, p < .001.

Emotions Following Inclusion Decisions

The majority of children (87%) reported happiness after including the in-group peer (Table 3). There was a significant interaction effect of context x age, Wald χ^2 (5) = 15.74, p < .01, showing that 8-year-olds reported less happiness than 4-year-olds in the gender context, b = -1.41, SE = .60, z = 2.42, p < .05. A smaller number of children attributed sadness (6%), and there was also a significant interaction effect of context x age on sadness attributions, Wald χ^2 (5) = 11.48, p < .05: 8-year-old children were more likely to report sadness than 4-year-old in the gender context, b = 2.41, SE = 1.10, z = 2.19, p < .05.

Emotions Attributed to Excluded Peers

As expected, children mostly attributed sadness (i.e., 66%) to the excluded out-group peer regardless of context (Table 4). Age had a significant main effect, Wald χ^2 (1) = 5.01, p < .05, as 4-year-olds (77%) were more likely to attribute sadness than 8-year-olds (58%), b = .72, SE = .32, z = 2.25, p < .05, OR = 2.05. Sixteen percent of the children attributed happiness to the excluded peer, irrespective of context and age. In addition, 11% of the children attributed anger, but only in the behavior problems contexts, Wald χ^2 (2) = 10.53, p < .01, and this attribution depended on age, Wald χ^2 (1) = 4.38, p < .05. Children were more likely to attribute anger to the aggressive excluded out-group peer than the excluded out-group peer with ADHD symptoms, b = .66, SE = .35, z = 1.89, p < .01, OR = 1.93. For both contexts, 8-year-olds attributed more anger than 4-year-olds, b = 1.44, SE = .69, z = 2.09, p < .05, OR = 4.22.

Discussion

In the present study, we aimed to shed light on children's inclusion decisions in contexts of gender and behavior problems, how they reason about their decisions, and which affective consequences they anticipate for themselves as includers and for excluded peers. We examined these processes in a sample of 4- and 8-year-olds to understand early emerging differences in children's judgments and emotions in these contexts. By studying children's inclusion decision-making, we extended previous social exclusion research, which has primarily focused on examining children's judgments in hypothetical situations where the exclusion decision has largely been prescribed (for exceptions, see Brenick & Killen, 2014; Diamond & Hong, 2010). We also extended previous work by focusing on inclusion/exclusion based on children's problem behaviors, which can reveal perceptions about, and biases associated with, common mental health issues in childhood.

Inclusion Decisions

Our first main finding was that the majority of children decided as expected to include the in-group member regardless of age and context as we predicted. This finding supports that social categories are recognized (particularly perceptually salient categories such as gender) and meaningful to children at early stages in development (Killen & Rutland, 2011). This shows that children primarily include peers who they identify with and who belong to their peer group (Abrams, Rutland, Cameron, & Marques, 2003). This also extends previous related research, which has documented that children judge gender-based exclusion to be acceptable, presumably because of societal expectations about gender roles (Killen et al., 2011). In addition, these findings demonstrate that the majority of children reject peers with behavior problems (see Barnett et al., 2012). This is likely because externalizing symptoms, including ADHD- and

aggression-related behavior problems, interfere with peer group functioning and expectations (Hymel, Rubin, Rowden, & LeMare, 1990).

Despite children's general preference to include in-group peers, children showed less ingroup bias in inclusion decision in the gender context compared to the behavior problem contexts. Specifically, children more frequently chose to include out-group peers (i.e., in roughly 30% of all cases) in the gender context compared to both the ADHD and aggression contexts (i.e., 7% and 5%, respectively). Children may be viewing gender norms as more fluid and breakable, compared to norms that relate to socially normative behavior. This may be because gender does not necessarily impede children's ability to cooperate in group settings. Because gender is a central intergroup difference that children recognize from early on (Turner & Brown, 2007), this semi-inclusive orientation may also be due to children's sympathy stemming from their own prior experiences of being excluded based on gender (Killen, 2007). These findings speak to the importance of intergroup contact. Encouraging friendship between peers of different socially salient categories early on in development may combat prejudice before negative intergroup attitudes become deeply entrenched (see Raabe & Beelmann, 2011; Rutland & Killen, 2015).

Reasoning Following Inclusion Decisions

To further understand *why* children make inclusion decisions based on group preferences and individual characteristics, we explored their reasoning for inclusion decisions. As expected, in the gender context, children typically used group identity reasoning (e.g., "Because he's a boy and I am a boy too") to justify their inclusion of the same-gender peer. This is likely because gender (along with ethnicity) is a central component of children's self-concept formation from

early on (Killen & Rutland, 2011), and as such, children likely put substantial effort into creating and maintaining a consistent gender group identity. In the ADHD context, children primarily used group functioning reasoning (e.g., "Bella [peer with ADHD] wasn't paying attention and you need to pay attention because if you don't, you'll knock over the tower") for including the child without ADHD. Previous work suggests that children view peers who display ADHD symptomatology as being disruptive (Gasser et al., 2017; Law et al., 2007); thus, it is likely that children prefer to include peers who do not display these characteristics and may contribute to, not impede, the group from achieving its goals. On the other hand, in the aggression context, children predominantly used stereotype reasoning (e.g., "If I chose Jackie [aggressive peer] she would push me too") for including the non-aggressive child. This finding suggests that, despite some ambiguity of the intentionality behind the child's aggressive act in our vignette, children may have quickly adopted a negative perception of the character that behaved in an aggressive manner. These stereotypes and negative perceptions are likely part of the reason why children with aggressive behavior problems experience high rates of rejection (Eisner & Malti, 2015; Morrow, Hubbard, McAuliffe, Rubin, & Dearing, 2006). Taken together, our findings suggest that when including peers into groups, children typically want to maintain a positive group concept and are likely to include others who promote a known peer group concept, and exclude others who may potentially threaten or place a negative light upon their image.

The results also shed light on developmental differences in children's reasoning following their inclusion decisions. Specifically, 4-year-olds used more group identity reasoning after including the in-group peer compared to 8-year-olds. This finding likely reflects children's understanding and conformity to salient group norms (e.g., gender) from an early age (Mulvey &

Killen, 2014). Four-year-olds may consider physical or behavioral characteristics central to their group identity. However, 8-year-olds are likely to be more differentiated in their self-concepts and may emphasize these characteristics as primary defining features less, but instead place more emphasis on other criteria such as hobbies or personality traits (Turner & Brown, 2007). Unexpectedly, we also found that 4-year-olds used less group functioning reasoning in the ADHD context and more group functioning reasoning in the aggression context. Four-year-olds might reference less group functioning reasoning in the ADHD context because they may not see such behavior as disruptive since they themselves are overall less inhibited (i.e., typically have lower levels of emotion regulation than 8-year-olds; Blandon, Calkins, Keane, & O'Brien, 2008). Thus, fidgeting might be more normative for them. On the other hand, 4-year-olds may use more group functioning reasoning in the aggression context because, since aggression is punished from a young age, children may think aggression disrupts the functioning of the group, whereas ADHD-behavior is less punished and thus may view it as less disruptive. Along the same vein, 4year-olds used more stereotype reasoning in the gender context, whereas 8-year-olds used this reasoning more in the aggression context. Previous findings have shown that children learn gender stereotypes (e.g., girls play with dolls, boys play with trucks) early on (Killen & Rutland, 2011); thus, 4-year-olds are likely to be more sensitive to stereotypically gendered behavior and condone gender-consistent decisions on the basis of complying with these norms. This is consistent with a previous finding that younger children (preschoolers) predominantly used stereotype reasoning for including a peer in a gender-stereotypic activity (Theimer, Killen, & Stangor, 2001), whereas older children (ages 7-13) mostly used moral reasoning considering prior history of opportunity and emphasizing equal treatment and access (Killen & Stangor,

2001). On the other hand, since physical aggression decreases beyond early childhood (Tremblay, 2010), pushing may not be viewed as a group norm and thus negative stereotypes of aggressive children may be stronger in middle childhood (Mulvey & Killen, 2016).

Emotions Following Inclusion Decisions

Regarding children's feelings after making *inclusion* decisions, the majority of children reported, as hypothesized, feeling happy after including the in-group member across age and context. Nevertheless, 8-year-olds reported less happiness and more sadness than 4-year-olds in the gender context. This finding suggests that, despite making the normative decision by including the same-gender peer, 8-year-olds may experience mixed emotions and feel sadness or guilt for excluding the opposite-gender peer. This is in line with previous work indicating that older children and adolescents report ambivalent (i.e., positive and negative) emotions after excluding an out-group peer (Malti et al., 2012), presumably because they desire a homogeneous, well-functioning group but also acknowledge the negative consequences for the excluded peer. In the ADHD and aggression contexts, however, children overwhelmingly reported feeling happy for including the in-group member. This may speak to the strength of intergroup attitudes surrounding this decision: children might believe peers with behavior problems should rightfully be excluded (see Park & Killen, 2010), and thus do not feel sadness or guilt for only including the in-group member.

Emotions as Excluded Out-Group Peer

Lastly, the majority of children attributed negative emotions to the excluded out-group peer. This is in line with previous related literature examining emotion attributions to excluded others using hypothetical exclusion scenarios (Chilver-Stainer et al., 2014; Gasser et al., 2013).

The result also revealed that younger children attributed more sadness whereas older children attribute more anger, which may be due to an increased understanding of different types of negatively valenced emotions (Malti & Noam, 2016). Interestingly, children anticipated the outgroup peer in the aggression context to feel angry after being excluded. This finding accentuates children's potential stereotypes regarding aggressive peers and their inability to regulate their anger (Lochman et al., 2010). Possibly, children want to avoid including aggressive peers because they anticipate such peers might cause conflict by lashing out in the peer group.

Conclusion

Taken together, our findings have some important implications. Despite different reasons for inclusion decisions and acknowledgement of the negative emotional reactions of the excluded out-group member, both 4- and 8-year-olds included the in-group member across contexts. This speaks to children's overwhelming preference for in-group homogeneity; however, this homogeneity may lead to prejudice and out-group stereotype formation. Over time, children who are excluded based on stereotypic assumptions may be denied opportunities of increasing importance (Killen et al., 2015). To prevent and decrease such attitudes, it may be important to enhance opportunities that foster voluntary and positive interactions between students who are different from one another (Tropp, 2015). In addition, children displayed emotional ambivalence when making decisions to include an in-group peer, even when knowing that the excluded peer would feel sad, which likely reflects children's awareness of the multifaceted nature of such contexts. This shows that children may benefit from discussions around the potential consequences for excluders, excluded, and the peer group at large.

Although this study provides valuable insight into how children feel and think about norms regarding peer inclusion and exclusion, there are several limitations to be addressed. First, we used a cross-sectional design, which did not allow for the examination of intra-individual change in children's decision-making and emotions. In addition, we did not study contexts of internalizing behavior, such as depression and anxiety, which may provide additional insights regarding the extent of children's normative knowledge and feelings about peers with varying mental health states. Finally, this study examined children's inclusion/exclusion decisions in relatively costly contexts that naturally favored the inclusion of the in-group member. It would be informative for future work to compare the patterns we found with children's inclusion/exclusion decision-making in contexts that do not pose any risk to the successful activity performance.

Despite these limitations, this study adds useful information to a growing body of work on the development of children's normative understanding of, and emotions associated with, peer inclusion/exclusion. Ultimately, understanding how and why children, particularly those with behavior problems, may be ostracized could inform the design of strategies targeting positive inter-individual and inter-group contact which may reduce inequality and prejudice and promote kindness in children.

References

- Abrams, D., Hogg, M., & Marques, J. (2005). *The social psychology of inclusion and exclusion*. New York, NY: Psychology Press.
- Abrams, D., Rutland, A., & Cameron, L. (2003). The Development of subjective group dynamics: Children's judgments of normative and deviant in-group and out-group individuals. *Child Development*, 74(6), 1840–1856. doi:10.1046/j.1467-8624.2003.00641.x
- Abrams, D., Rutland, A., Cameron, L., & Marques, J. M. (2003). The development of subjective group dynamics: When in-group bias gets specific. *British Journal of Developmental Psychology*, 21(2), 155-176. doi:10.1348/026151003765264020
- Achenbach, T. M., & Rescorla, L. A. (2000). *Manual for the ASEBA Preschool Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms and profiles*. Burlington: University of Vermont, Research Center for Children, Youth, and Families
- Arsenio, W. (2014). Moral emotion attributions and aggression. In M. Killen & J. G. Smetana (Eds.), Handbook of moral development (2nd ed., pp. 235–255). New York, NY: Psychology Press.
- Barnett, M. A., Sonnentag, T. L., Livengood, J. L., Struble, A. L., & Wadian, T. W. (2012). Role of fault attributions and desire, effort, and outcome expectations in children's anticipated

- responses to hypothetical peers with various undesirable characteristics. *Journal of Genetic Psychology*, 173(3), 317-329. doi:10.1080/00221325.2011.610391
- Bell, L., Long, S., Garvan, C., & Bussing, R. (2011). The impact of teacher credentials on ADHD stigma perceptions. *Psychology in the Schools*, 48(2), 184-197. doi:10.1002/pits.20536
- Bennett, M., & Sani, F. (2008). Children's subjective identification with social groups. In S.

 Levy & M. Killen (Eds.), *Intergroup attitudes and relationships from childhood through*adulthood (pp. 19–31). Oxford, UK: Oxford University Press.
- Blakemore, J. E. O., Berenbaum, S. A., & Liben, L. S. (2009). *Gender development* (pp. 519). New York, NY: Psychology Press.
- Blandon, A. Y., Calkins, S. D., Keane, S. P., & O'Brien, M. (2008). Individual differences in trajectories of emotion regulation processes: The effects of maternal depressive symptomatology and children's physiological regulation. *Developmental Psychology*, 44(4), 1110-1123. doi:10.1037/0012-1649.44.4.1110
- Brenick, A., & Killen, M. (2014). Moral judgments about Jewish-Arab intergroup exclusion: The role of cultural identify and contact. *Developmental Psychology*, *50*(1), 86–99. doi: 10.1037/a0034702
- Chilver-Stainer, J., Gasser, L., & Perrig-Chiello, P. (2014). Children's and adolescents' moral emotion attributions and judgements about exclusion of peers with hearing impairments.

 *Journal of Moral Education, 43(3), 235-249. doi:10.1080/03057240.2014.913515
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation* analysis for the behavioural sciences (3rd ed.). Mahwah, NJ: Lawrence Erlbaum

Associates Publishers.

- Diamond, K. E., & Hong, S. (2010). Young children's decisions to include peers with physical disabilities in play. *Journal of Early Intervention*, 32(3), 163-177. doi: 10.1177/1053815110371332.
- Eisner, M.P., & Malti, T. (2015). Aggressive and violent behavior. In M. E. Lamb (Vol. Ed.) & R. M. Lerner (Ser. Ed.), *Handbook of child psychology and developmental science, Vol.*3: Social, emotional and personality development (7th ed., pp. 795-884). New York, NY: Wiley.
- Fanger, S. M., Frankel, L. A., & Hazen, N. (2012). Peer exclusion in preschool children's play:

 Naturalistic observations in a playground setting. *Merrill-Palmer Quarterly*, 58(2), 224254. doi:10.2307/23098463
- Gasser, L., Gruetter, J., Torchetti, L., & Buholzer, A. (2017). Competitive classroom norms and exclusion of children with academic and behavior difficulties. *Journal of Applied Developmental Psychology*. 49, 1-11. doi:10.1016/j.appdev.2016.12.002
- Gasser, L., Malti, T., & Buholzer, A. (2014). Swiss children's moral and psychological judgments about inclusion and exclusion of children with disabilities. *Child Development*, 85(2), 532-548. doi: 10.1111/cdev.12124
- Gillen-O'Neel, C., Ruble, D., & Fuligni, A. (2011). Ethnic stigma, academic anxiety, and intrinsic motivation in middle childhood. *Child Development*, 82, 1470-1485. doi:10.1111/j.1467-8624.2011.01621.x
- Harter, S. (2012). *The construction of the self: Developmental and sociocultural foundations* (2nd Ed.). New York, NY: Guilford Press.

- Hinshaw, S. P., & Stier, A. (2008). Stigma as related to mental disorders. *Annual Review of Clinical Psychology*, 4, 367-393. doi:10.1146/annurev.clinpsy.4.022007.141245
- Hitti, A., & Killen, M. (2015). Expectations about ethnic peer group inclusivity: The role of shared interests, group norms, and stereotypes. *Child Development*, 86, 1522–1537. doi:10.11.11/cdev.12393
- Hoza, B. (2007). Peer functioning in children with ADHD. *Journal of Pediatric Psychology*, 32(6), 655-663. doi:10.1016/j.ambp.2006.04.011
- Hymel, S., Rubin, K. H., Rowden, L., & LeMare, L. (1990). Children's peer relationships: Longitudinal prediction of internalizing and externalizing problems from middle to late childhood. *Child Development*, 61, 2004–2021.
- Juvonen, J., & Gross, E. F. (2005). The rejected and the bullied: Lessons about social misfits from developmental psychology. In K. D. Williams, J. P. Forgas & W. von Hippel (Eds.), *7th annual Sydney symposium of social psychology: "The social outcast: Ostracism, social exclusion, rejection, and bullying."* (pp. 155-170). New York, NY: Psychology Press.
- Killen, M. (2007). Children's social and moral reasoning about exclusion. *Current Directions in Psychological Science*, *16*(1), 32-36. doi:10.1111/j.1467-8721.2007.00470.x
- Killen, M., Elenbaas, L., & Rutland, A. (2015). Balancing the fair treatment of others while preserving group identity and autonomy. *Human Development*, 58(4-5), 253-272. doi:10.1159/000444151

- Killen, M., & Malti, T. (2015). Moral judgments and emotions in contexts of peer exclusion and victimization. *Advances in Child Development and Behavior*, 48, 249-276. doi:10.1016/bs.acdb.2014.11.007
- Killen, M., Mulvey, K. L., Richardson, C., Jampol, N., & Woodward, A. (2011). The accidental transgressor: Morally-relevant theory of mind. *Cognition*, *119*(2), 197-215.
- Killen, M., & Rutland, A. (2011). *Children and social exclusion: Morality, prejudice, and group identity*. New York: Wiley/Blackwell Publishers. doi:10.1002/9781444396317
- Killen, M., & Stangor, C. (2001). Children's social reasoning about inclusion and exclusion in gender and race peer group contexts. *Child Development*, 72(1), 174–186. doi:10.1111/1467-8624.00272
- Lau, A. S., Guo, S., Tsai, W., Nguyen, D. J., Nguyen, H. T., Ngo, V., & Weiss, B. (2016).
 Adolescents' stigma attitudes toward internalizing and externalizing disorders: Cultural influences and implications for distress manifestations. *Clinical Psychological Science*, 4(4), 704-717. doi:10.1177/2167702616646314
- Law, G. U., Sinclair, S., & Fraser, N. (2007). Children's attitudes and behavioural intentions towards a peer with symptoms of ADHD: Does the addition of a diagnostic label make a difference? *Journal of Child Health Care*, 11(2), 98-111. doi:10.1177/1367493507076061
- Lochman, J. E., Barry, T., Powell, N., & Young, L. (2010). Anger and aggression. In D. W. Nangle, D. J. Hansen, C. A. Erdley & P. J. Norton (Eds.), *Practitioner's guide to empirically based measures of social skills* (pp. 155-166). New York, NY: Springer. doi:10.1007/978-1-4419-0609-0_10

- Malti, T. (2016). Toward an integrated clinical-developmental model of guilt. *Developmental Review*, 39, 16-36. doi:10.1016/j.dr.2015.11.001
- Malti, T., Killen, M., & Gasser, L. (2012). Social judgments and emotion attributions about exclusion in Switzerland. *Child Development*, 83, 697-711. doi:10.1111/j.1467-8624.2011.01705.x
- Malti, T. & Krettenauer, T. (2013). The relation of moral emotion attributions to pro- and antisocial behavior: A meta-analysis. *Child Development*, 84, 397-412. doi:10.1111/j.1467-8624.2012.01851.x
- Malti, T., & Noam, G.G. (2016). Social-emotional development: From theory to practice.

 European Journal of Developmental Psychology, 13(6), 652-665.

 doi:10.1080/17405629.2016.1196178
- Malti, T., & Ongley, S. (2014). The development of moral emotions and moral reasoning. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 163-183). NY: Psychology Press.
- Malti, T., Zuffianò, A., Cui, L., Colasante, T., Peplak, J., & Bae, N. Y. (2017). Children's healthy social-emotional development in contexts of peer exclusion. In C. Spiel, N. J. Cabrera, & B. Leyendecker, (Eds.), *Handbook of positive development of minority children* (pp. 295-306). Netherlands: Springer.
- Møller, S. J., & Tenenbaum, H. R. (2011). Danish majority children's reasoning about exclusion based on gender and ethnicity. *Child Development*, 82(2), 520-532. doi:10.1111/j.1467-8624.2010.01568.x

- Morrow, M. T., Hubbard, J. A., McAuliffe, M. D., Rubin, R. M., & Dearing, K. F. (2006).
 Childhood aggression, depressive symptoms, and peer rejection: The mediational model revisited. *International Journal of Behavioral Development*, 30(3), 240-248.
 doi:10.1177/0165025406066757
- Mulvey, K. L., & Killen, M. (2014). Challenging gender stereotypes: Resistance and exclusion. *Child Development*. 86(3), 681-694. doi:10.1111/cdev.12317.
- Mulvey, K. L., & Killen, M. (2016). Keeping quiet just wouldn't be right: Children's and adolescents' evaluations of challenges to peer relational and physical aggression. *Journal of Youth and Adolescence*, 45(9), 1824-1835. doi:10.1007/s10964-016-0437-y
- Nangle, D. W., Erdley, C. A., Zeff, K. R., Stanchfield, L. L., & Gold, J. A. (2004). Opposites do not attract: Social status and behavioral-style concordances and discordances among children and the peers who like or dislike them. *Journal of Abnormal Child Psychology*, 32(4), 425-434. doi:10.1023/B:JACP.0000030295.43586.3
- Nesdale, D., & Dalton, D. (2011). Children's social groups and intergroup prejudice: Assessing the influence and inhibition of social group norms. *British Journal of Developmental Psychology*, 29(4), 895-909. doi:10.1111/j.2044-835X.2010.02017.x
- Nguyen, C., & Malti, T. (2014). Children's judgments and emotions about social exclusion based on weight. *British Journal of Developmental Psychology*, *32*(3), 330-344. doi:10.1111/bjdp.12045
- Park, Y. & Killen, M. (2010). When is peer rejection justifiable?: Children's understanding across two cultures. *Cognitive Development*, 25, 290-301. doi:10.1016/j.cogdev.2009.10.004

- Peugh, J. L., & Enders, C. K. (2004). Missing data in educational research: A review of reporting practices and suggestions for improvement. *Review of Educational Research*, 74, 525-556. doi:10.3102/00346543074004525
- Piehler, T. F., & Dishion, T. J. (2007). Interpersonal dynamics within adolescent friendships:

 Dyadic mutuality, deviant talk, and patterns of antisocial behavior. *Child Development*,

 78(5), 1611-1624. doi:10.1111/j.1467-8624.2007.01086.x
- Raabe, T., & Beelmann, A. (2011). Development of ethnic, racial, and national prejudice in childhood and adolescence: A multinational meta-analysis of age differences. *Child Development*, 82(6), 1715-1737. doi:10.1111/j.1467-8624.2011.01668.x.
- Richardson, C. B., Mulvey, K. L., & Killen, M. (2012). Extending social domain theory with a process-based account of moral judgments. *Human Development*, 55(1), 4-25. doi:10.1159/000335362
- Rutland, A., & Killen, M. (2015). A developmental science approach to reducing prejudice and social exclusion: Intergroup processes, social-cognitive development, and moral reasoning. *Social Issues and Policy Review*, *9*(1), 121-154.doi: 10.1111/sipr.12012
- Smith, L. A., & Williams, J. M. (2001). Children's understanding of the physical, cognitive and social consequences of impairments. *Child: Care, Health and Development*, 27(6), 603–617. doi:10.1046/j.1365-2214.2001.00236.x
- Statistics Canada. (2013). *NHS profile, Mississauga, CY, Ontario, 2011*. (Catalogue number 99-004-XWE). Retrieved from the Statistics Canada website: http://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E

- Theimer, C. E., Killen, M., & Stangor, C. (2001). Young children's evaluations of exclusion in gender-stereotypic peer contexts. *Developmental Psychology*, *37*(1), 18-27. doi:10.1037//0012-1649.37.1.18
- Thompson, R. A., & Lagattuta, K. H. (2006). Feeling and understanding: Early emotional development. In K. McCartney, & D. Phillips (Eds.), *Handbook of early childhood development* (pp. 317-337, pp. 663). Malden: Blackwell Publishing.
- Tremblay, R. E. (2010). Developmental origins of disruptive behaviour problems: The original sin hypothesis, epigenetics and their consequences for prevention. *Journal of Child Psychology and Psychiatry*, *51*(4), 341-367. doi:10.1111/j.1469-7610.2010.02211.x
- Tropp, L. R. (2015). Intergroup contact. In J. Bennett (Ed.), *Sage Encyclopedia of Intercultural Competence* (pp. 536-539). Thousand Oaks, CA: Sage.
- Turner, K. L., & Brown, C. S. (2007). The centrality of gender and ethnic identities across individuals and contexts. *Social Development*, *16*(4), 700-719. doi:10.1111/j.1467-9507.2007.00403.x
- Vandell, D. L., Nenide, L., & Van Winkle, S. J. (2006). *Peer relationships in early childhood*.

 Blackwell Publishing, Malden. doi:10.1002/9780470757703.ch2
- Whitley, J., & Gooderham, S. (2015). Mental health promotion efforts for children and youth in Canada and beyond: Evidence in research, policy and practice. *Exceptionality Education International*, 25(1), 91-111. Retrieved from http://ir.lib.uwo.ca/eei/vol25/iss1/5

Table 1

Coding System for Reasoning Following Inclusion Decisions

Category	Description	Example
Moral	Fairness, equality, and inclusion, as well as other-oriented concerns of equal access for all individuals.	Gender context: "Just because he's a boy doesn't mean he shouldn't be invited to the party."
Group Identity	Group membership and/or personal identity that is defined by belonging to a certain group of friends or peers.	Gender context: "Because he's a boy and I am a boy too." ADHD context: "Because [peer without ADHD] is kind of like my class friend" Aggression context: "If I pick [non-aggressive peer] then I would have more friends."
Group Functioning	Responses that highlight group dynamics and how various groups work/should work.	ADHD context: "[Peer with ADHD] wasn't paying attention and you need to pay attention because if you don't, you'll knock over the tower." Aggression context: " because [non-aggressive peer] could be better in the reading circle because they could talk or read together."
Stereotypes	Themes of widely held ideas or images of a particular group.	Gender context: "She's the only girl and probably won't like cars." ADHD context: "If I picked [peer with ADHD], she would be annoying and won't listen to me." Aggression context: "If I chose [aggressive peer] she would push me too"
Counterfactual	Responses that excuse acting against a moral or social norm.	Gender context: "He will feel bad if he's the only boy there."
Undifferentiated	Unelaborated and undifferentiated responses	Gender context: "Because I like her hair better"

Table 2

Frequencies of Reasoning after Including In-Group (%) by Age Group and Context

	4-year-olds	8-year-olds	Total
Gender Context			
Group Identity	55	54	54
Group Functioning	0	0	0
Stereotypes	16	11	14
ADHD Context			
Group Identity	4	0	2
Group Functioning	63	82	73
Stereotypes	19	18	18
Aggression Context			
Group Identity	2	2	2
Group Functioning	44	27	38
Stereotypes	38	69	57

Note. The Moral, Counterfactual, and Undifferentiated categories occurred infrequently (< 5%) and were not considered in the table or analyses; thus, total frequencies do not add to 100. Missing responses ranged from 2% to 9%.

Table 3

Frequencies of Emotions after Including In-Group (%) by Age Group and Context

	4-year-olds	8-year-olds	Total	
Gender Context				
Happiness	84	68	77	
Sadness	5	22	12	
ADHD Context				
Happiness	83	86	85	
Sadness	2	4	3	
Aggression Context				
Happiness	81	80	81	
Sadness	2	0	1	

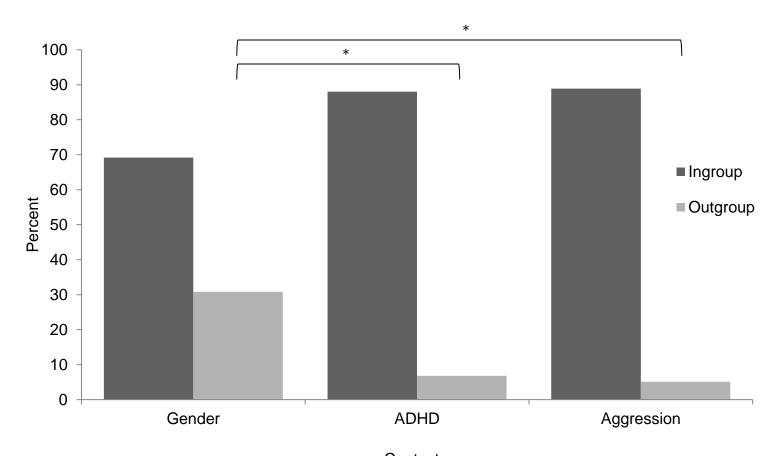
Note. The neutral, anger, and other emotion categories occurred infrequently (< 5%) and were not considered in the table or analyses; thus, total frequencies do not add up to 100. Missing responses ranged from 5% to 9%.

Table 4

Frequencies of Emotions for Excluded Out-Group (%) by Age Group and Context

	4-year-olds	8-year-olds	Total
Gender Context			
Happiness	14	27	20
Sadness	68	65	67
Anger	0	0	0
ADHD Context			
Happiness	13	9	11
Sadness	67	55	60
Anger	4	11	8
Aggression Context			
Happiness	17	11	14
Sadness	69	54	61
Anger	6	21	14

Note. The neutral and other emotion categories occurred infrequently (< 5%) and were not considered in the table or analyses; thus, total frequencies do not add up to 100. Missing responses ranged from 4% to 9%.



Context *Figure 1.* Frequencies of inclusion decisions (%) by context.

Appendix

Gender Context Story (Male Version): "Hi! I'm John. I'm having a car themed birthday party at my house. I am only allowed to invite three people and I already invited Timothy and Daniel. I can only invite one more person, either Michael or Sarah. If this were your party, who would you invite: Michael or Sarah?"

Gender Context Story (Female Version): "Hi! I'm Sally. I'm having a doll themed birthday party at my house. I am only allowed to invite three people and I already invited Samantha and Erika. I can only invite one more person either Sarah or Michael. If this was your party, who would you invite: Sarah or Michael?"

ADHD Context Story: "Hi, my name is Ricardo, my favorite game to play is Jenga! Since I sat quietly today during class, I get to pick who I want to sit at my table and play Jenga with me. I already chose Jimmy and Philip. I can only pick one more person to sit at my table help me build a tall tower with blocks, either Steven or Tiago. Let's meet them! Let's look at Steven [Video shows Steven quietly sitting at the table talking to other puppets]. Now let's look at Tiago [Tiago who is tapping on the table, fidgeting with the blocks, and jumping out of his seat]. Who should I pick to play Jenga with: Steven or Tiago?"

Aggression Context Story: "Hi! I'm Jackson. My favourite kindergarten activity is reading circle. I sat down the quickest today, so I get to pick who I want to be in my reading circle. I have to pick between Robert and Nicolas. Let's look at Robert [Video shows Robert softly pushing child]. Now let's look at Nicolas [show video of Nicolas positive conversing with another child]. Who should I pick to be in my reading circle: Nicholas or Robert?"