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The relations among theory of mind, behavioral inhibition, and peer interactions in early childhood

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Abstract

The current study examined relations among child temperament, peer interaction, and theory of mind (ToM) development. We hypothesized that 1) children classified as behaviorally inhibited at 24 months would show less ToM understanding at 36 months in comparison to non-behaviorally inhibited children, 2) children who displayed negative peer interaction behaviors in a peer dyadic interaction at 24 months would exhibit less ToM understanding at 36 months, and 3) Behavioral inhibition (BI) and the degree of negative behaviors during a peer interaction would jointly influence ToM development, such that children with both heightened BI and negative peer interaction behaviors would exhibit worse ToM performance than behaviorally inhibited children who did not display negative social behaviors. Both BI and negative peer interaction behaviors were associated with passing fewer ToM tasks. The data revealed that children high in both BI and negative peer interaction behaviors passed fewer ToM tasks at 36 months of age than those high in BI and low in negative peer interactions or those low in BI.

Keywords

Theory of Mind; Temperament; Behavioral Inhibition; Peer Interactions

Theory of Mind (ToM) refers to the ability to "read" or understand the beliefs, desires or intentions of others, as well as to understand that these may be different from one's own beliefs, desires, or intentions (Klin, 2000). ToM is viewed as an essential skill in adaptive social and cognitive development (Baird, 2008; Symons & Clark, 2000). It has been positively associated with language (e.g., Astington & Baird, 2005), executive function (e.g., Carlson & Moses, 2001), school readiness (e.g., Astington & Pelletier, 2005), increased positive social skills (e.g., Capage & Watson, 2001; Watson, Nixon, Wilson & Capage, 1999), and moral reasoning (e.g., Baird & Astington, 2004). Understanding what factors contribute to ToM acquisition can in turn assist in the prediction of future social and cognitive development. Thus, the current study examined whether two child factors, temperament and peer interaction behaviors, are associated with ToM skills one year later.

The conceptual framework from which ToM is often studied is through belief-desire reasoning. Beliefs are broadly understood as using convictions and ideas that people have toward a particular proposition to represent their world (Stich, 1983; Wellman & Miller, 2008; Wellman, Cross & Watson, 2001). Desires refer to individual motivational goals (Wellman & Miller, 2008). This framework claims that people understand others' behaviors as products of intentions, which are deduced from the understanding that an agent's desires are shaped by their beliefs in the situation (Wellman & Miller, 2008). Therefore, false belief tasks are commonly used to assess ToM. Generally, in these tasks a child is presented with a story that assesses understanding of either his or her own false beliefs or the false beliefs of another person.

Although the theoretical view of belief and desire reasoning has been the basis of much of the research on behaviors and outcomes associated with ToM, there has been recent argument for a broader perspective of social understanding. Wellman and Miller (2008) propose that ToM should be understood and studied not just through belief-desire reasoning but also through deontic reasoning. Deontic reasoning is a form of social understanding and takes into account the social influences of behavior. This broader theory encompasses both mental states and social norms and highlights the importance of the social context in interpreting behaviors (Baird, 2008). Overall, individual differences in social development may be better explained by examining factors associated with both deontic and belief-desire reasoning, as they both seem to influence each other across development (Wellman & Miller, 2008). They are both implicated in the development of a broader sense of social understanding and are vulnerable to the influences of experience. Thus, early social experience and behavior may contribute to the development of ToM, just as ToM may contribute to later social behavior. As such, the current paper examines how social experience, indicated by behavioral inhibition (BI) and behavior with a peer, may influence the development of ToM.

In fact, there is evidence for links between social behavior with peers and ToM development. Specifically, negative peer interaction behaviors have been associated with delayed ToM development. Minde (1992) found a relation between aggression and delays in perspective taking and interpersonal awareness in a sample of 4-year-olds. Deficits in ToM development have also predicted unique variance in behavior problems during a one month follow-up visit (regulatory behavior problems and non-compliance) (Hughes & Esnor, 2006). Similarly, Capage and Watson (2001) found negative associations between aggression and false belief understanding and positive associations between social competence and false belief understanding in preschool and kindergarten children. Overall, children with higher levels of aggression performed poorly on administered false belief tasks and were rated lower in social competence than those with low aggression (Capage & Watson, 2001). The ToM measures were collected one month prior to collection of additional variables. As well, Hughes and colleagues found that disruptive preschoolers had delays in both false belief performance and emotion understanding (Hughes, Dunn & White, 1998). One possible explanation for these results is that negative peer interaction behaviors are a result of not understanding appropriate social norms. It is also possible that engagement in these types of behaviors early on leads to fewer opportunities to learn social understanding, an important aspect of ToM development.

The little longitudinal work that has been done provides evidence that there are bidirectional relations between ToM and social behavior. Jenkins and Astington (2000) conducted a longitudinal study in which they found that false belief performance predicted children's later joint planning and role assignment during pretend play. In the other direction, Hughes and Dunn (1998) found that mental state talk during pretend play at 4 years of age predicted ToM performance at 5 years of age. Nelson and colleagues (Nelson, Adamson & Bakeman, 2008), while controlling for language comprehension, found toddler's joint engagement with their mothers at 18-21 months was positively related to later false belief scores in preschool. Although these studies begin to examine the predictive roles of social behavior for ToM development, most research has examined how ToM relates to concurrent social behavior. For instance, although ToM capabilities at four years of age have been correlated with cooperative pretend play with a peer at the same age (Dunn & Cutting, 1999), knowledge about how these preschoolers interacted socially with peers in toddlerhood is largely unknown. Therefore, it remains unclear which specific social behaviors with peers in toddlerhood would facilitate preschool ToM acquisition. Behaviors seen in early peer interactions may be indicative of greater social experience and a stronger foundation for social understanding skills, such as ToM. More longitudinal work is needed to examine how

early social behaviors influence later ToM development. The current study adds to this sparse literature.

While early social behavior may be associated with ToM acquisition, it is likely that there are additional early factors that influence ToM development and broader social understanding skills. Temperament is one such factor that may influence ToM development (Ronald, Happé, Hughes, & Plomin, 2005). Children's social experiences and behaviors can be greatly shaped by temperament (Rothbart & Bates, 2006). One temperamental construct that has been studied extensively in relation to social behavior is behavioral inhibition (BI; Fox et al., 2005; Kagan, Reznick & Snidman, 1985; Rubin, Coplan, & Bowker, 2009). Behaviorally inhibited children are vigilant to novel situations, objects, and people (Kagan et al., 1984). They are generally characterized with this temperament based on parent report and laboratory observation of children' reaction to unfamiliar events, objects, and people (Fox et al, 2001; Garcia-Coll et al., 1984; Kagan et al., 1988). In these novel situations, behaviorally inhibited children often withdraw from play behavior, are unlikely to approach a novel object or person, seek proximity to their caregiver, remain vigilant of their surroundings, and sometimes display distressed affect.

Furthermore, behaviorally inhibited children are at risk for anxiety disorders and social withdrawal (Chronis-Tuscano, et al., 2009; Fox et al., 2005; Rubin, Coplan, & Bowker, 2009) and show lower social competence with peers in childhood (Bohlin, Hagekull & Andersson, 2005; Kagan & Snidman, 1991; Rubin, Burgess, & Hastings, 2002). In social settings, behaviorally inhibited children may not focus on engaging with a peer because they are limited by their negative arousal from the novel situation. Thus, children with this temperament may not reap the same benefits from early peer experiences as non-inhibited children. One such benefit is the development of perspective taking, which would influence the development of ToM. Much of social behavior is learned through experience and interactions with others. If behaviorally inhibited children feel uncomfortable around peers then they may be less likely to play and interact with them and are therefore missing out on important social learning experiences. In addition, children who are focused on their own distressed perspective during a social interaction may not observe the other child's behavior or realize their potentially different perspective, a prerequisite for theory of mind. Although the link between social behavior and BI has been made, little work has explored whether this temperamental construct specifically relates to the development of ToM.

Overall, the current study examined two factors thought to influence ToM development, toddler temperament (i.e., BI) and negative peer behaviors during a social dyad. We hypothesized that 1) children classified as behaviorally inhibited at 24 months would show less ToM understanding at 36 months in comparison to non-behaviorally inhibited children, 2) children who displayed negative peer interaction behaviors in a peer dyadic interaction at 24 months would exhibit less ToM understanding at 36 months, and 3) BI and theproportion of negative behaviors during a peer interaction would jointly influence ToM development, such that children with both heightened BI and negative peer interaction behaviors would exhibit lower ToM performance than behaviorally inhibited children who did not display negative social behaviors. Indeed, as behaviorally inhibited children tend to display social reticence with peers later in childhood, they likely have fewer social experiences in comparison to non-inhibited children. In addition, the few peer experiences they do have may include more negative interactions than non-behaviorally inhibited children experience. However, not all BI children have negative peer experiences (Almas et al., in press). Differences in peer experiences may manifest themselves in differences in social behavior and later social understanding. Therefore, the current study predicted that children with greater BI who displayed negative social strategies or behaviors with peers would be at

increased risk for poor ToM performance a year later compared to those who did not display negative social behaviors.

Method

Participants

This research was part of a larger longitudinal study of temperament in young children followed since four months of age. Screening ensured that infants were born full-term and typically developing at the point of recruitment. Those who met these criteria were brought into the lab at four months of age to assess their reactivity to novel auditory and visual stimuli (Fox, Henderson, Rubin et al., 2001; Hane, Fox, Henderson, & Marshall, 2008). Two hundred and ninety-one four-month-olds were divided into three groups based on this assessment: positive reactivity (n=103), negative reactivity (n=105), and controls (n=83). Those in the negative reactivity group scored above the mean on both negative affect and motor arousal and below the mean on positive affect. Infants that scored above the mean on both positive affect and motor arousal and below the mean on negative affect were classified as the positive reactivity group. Those who did not meet the criteria for either group were classified as the controls (See Hane et al., 2008 for a more detailed description). Overall, this selection procedure provided a sample of infants representing a normally distributed, but wide, range of temperamental reactivity to novelty.

As part of the larger longitudinal study, these selected infants were assessed at 24 and 36 months of age. At 24 months of age, 224 children were assessed for BI and 191 of these children were assessed for peer interaction behaviors. At 36 months of age, 134 of these children were assessed on ToM tasks. Of the 239 participants who had data for at least one of the three measures of interest (BI, peer interaction behavior, or ToM), there were 127 females and 112 males. Of these children, 66.5% were Caucasian, 13% were African American, 2.9% were Hispanic, and 17.5% were mixed or other. Neither race nor gender related to any of the variables of interest (p's > .05).

Procedures

Observed Behavioral Inhibition—At 24 months of age, children participated in a BI paradigm in which they were presented with several novel stimuli (Fox et al., 2001). Stimuli included: an unfamiliar environment, an adult stranger, and a novel toy. In addition, the experimenter encouraged them to crawl through a pop-up tunnel. At the beginning of this visit, the toddler and mother entered an unfamiliar laboratory room. The mother was instructed to fill out questionnaires and let her child play independently on the floor with the provided toys. This free-play period lasted 5 minutes. Afterwards, the toys were cleared from the room and an unfamiliar female research assistant entered the room with a toy dump truck and blocks. The adult sat there quietly for 1 minute, played with the toys for 1 minute, and then invited the child to play with her (if the toddler had yet to approach) for a final minute. The research assistant then took the truck and blocks out of the room and came back with a toy robot. The robot was left in the room for 2 minutes and had flashing lights, made noise, and moved around the room by remote control. After the robot was taken out of the room, the research assistant encouraged the toddler to crawl through a pop-up tunnel. The latency to vocalize, latency to approach the novel stimuli, and the proportion of time in proximity to mom (all measured in seconds) were behaviorally coded. Two independent coders became reliable on 20% of the assessments (intra-class correlations ranged from .75 to .99).

Peer Interaction Behaviors—At 24 months of age, children also participated in a peer dyad assessment in which they were paired with an unselected non-target peer who was an

unfamiliar, same-aged, and same-sex peer. This assessment was typically conducted following the BI assessment, on the same day. During this peer interaction, a task was administered that involved the joint participation of both children (i.e., cooperation). For the first trial, one child was given the body of a *Mr. Potato Head* and the other child was given the pieces of the toy (e.g., arms, legs, nose, mouth, etc.). The children were told to work together to put the *Mr. Potato Head* together. For the second trial, the child that started off with the body was given the pieces and the child that started off with the pieces was given the body. Each trial lasted about 2.5 minutes, on average, although there was some variability in the length of trials across dyads. Trial 2 followed immediately after Trial 1.

The 24-month peer-interaction task was coded in order to measure the frequency of individual behaviors reflecting negative peer interaction. Specifically, grabbing, demanding, and rejecting behaviors were coded as they occurred. Further description of these codes is given in Table 1. Two independent coders became reliable on 20% of the assessments with an intra-class correlation of .68 across all negative behaviors. Once coded, the total frequency of each behavior was summed across the trials in order to provide a measure of that behavior during both contexts, when the child had the body and when the child had the pieces. These scores were then divided by the number of 30-second epochs to control for task length. Finally, due to the skewed nature of these scores, each ratio score (frequency/epochs) was dichotomized into a presence/absence score (1 = present, 0 = absent).

Theory of Mind—At 36-months of age the children completed four ToM tasks. The first three tasks were based on tasks in the theory of mind scale developed by Wellman and Lui (2004). The *Deceptive Container Task* involved showing the child a Band-aid box with a toy pig inside. The child was asked what another person, Peter, would think is inside, Band-aids or a pig. The *Knowledge Access Task* involved showing the child a drawer and asking him/her what was inside. Afterwards, the experimenter showed the child that there was a toy dog inside the drawer. If the child had guessed a dog, another type of figurine was shown in the drawer. The experimenter then asked if a girl, Polly, knew what was in the drawer. The *Explicit False Belief Task* involved a story about a boy, Scott, who was looking for his mittens. The child was told that Scott thinks his mittens are in his backpack, but they are actually in the closet. The child was then asked where Scott would look for his mittens. The *Unexpected Transfer Task*, based largely on a tasks developed by Wimmer and Perner (Perner & Wimmer, 1988; Wimmer & Perner, 1983), involved a story about a boy named Max. Max puts chocolate in a blue cabinet and then goes outside to play. While Max was outside, his mother moved the chocolate to the green cabinet. The child was asked where Max would look for his chocolate when he came back inside.

All four tasks included target questions (listed above) and a memory question about the story. The memory question was a control question to ensure that the child understood the story being told. For example, for the *Deceptive Container Task* the child was asked if Peter saw inside the box. In order for a child to pass a task s/he had to answer both the target and memory questions correctly.

Results

Preliminary Analyses

Composite scores were made for the three variables of interest: negative peer interaction behaviors, BI, and ToM performance. The negative peer behavior composite was based on a sum of the presence/absence scores of grab initiations, demand initiations, and rejecting responses (to other's initiations) during the peer interaction task, M = 1.83, SD = 1.01, range = 3.0, *max* =3.0, *min* = 0.0. In accordance with the temperament literature (see Calkins et al., 1996; Fox et al., 2001; Kagan et al., 1987), the overall index of BI included standardized

scores for the codes of latency to vocalize, latency to approach/touch novel stimuli, and the proportion of time in proximity to the mother during Freeplay, Stranger, Robot, and Tunnel tasks. BI composite scores were computed as the mean of the standardized codes across the four tasks, M = −.01, SD = .40, range = 2.0, max = −.74, min = 1.25. Lastly, ToM scores were created as a sum composite of the dichotomous performance scores, pass (1) or fail (0), on the four tasks, M = .33, SD = .55, range = 2.0, max = 2.0, min = 0.0. We examined each measure as well as the interaction term noted below for normality. Data points for two subjects on the interaction term were greater than 2 SD from the mean and a visual inspection showed they were separated from the rest of the distribution. Thus, in order to confirm that all results were not due to these extreme scores, these subjects were removed from all further analysis (means and SD reported above do not include the outliers).

A Pearson correlation was used to explore the concurrent relations between BI and negative peer behavior scores at 24 months. Using an alpha level of 0.05, this test was not found to be statistically significant, $r = -.04$, $p = .57$.

Data Analysis Plan

Linear regression in a structural equation modeling framework with maximum likelihood estimation (MLE) was conducted on the 239 participants, who had data for at least one of the variables of interest (minus the 2 outliers). In order to assess the longitudinal relations between BI and negative peer behaviors at 24 months and ToM performance at 36 months, linear regressions were computed in Mplus 5.21 (Muthén & Muthén, 2007). The use of MLE within a structural equation framework assumes the data are missing at random, which allows the model parameters to be informed by all cases that contribute a portion of the data, and is recommended as an appropriate way to accommodate missing data (Little & Rubin, 1987; Schafer & Graham, 2002). Indeed, an examination of the data for the current analysis suggests that patterns of missing data did not violate the assumption that they were missing completely at random (MCAR), Little's MCAR χ^2 (9) = 7.21, $p = .62$. Therefore, all available data were used for the entire analysis, $n = 239$. In addition, BI and negative peer behavior scores at 24 months were mean-centered prior to the analysis and their interaction was computed as the product of the two mean-centered variables.

BI, Negative Peer Behavior, and ToM

For the regression model, BI and negative peer behavior scores were regressed onto the ToM performance composite, both individually and their interaction. This model explained 14% of the variance, R^2=.14, p= .03. There was a main effect of BI on ToM performance, $\beta = -.29$, $t = -2.43$, $p = .02$. There was also a main effect of negative peer behavior on ToM performance, $\beta = -.15$ $t = -2.33$, $p = .002$. In addition, there was a significant interaction of BI by negative peer behavior on ToM performance, $\beta = -.34$, $t = -2.33$, $p = .02$ (Figure 1). This interaction was then probed and plotted according to standards outlined by Aiken and West (1991). High (left) and low (right) values of the moderator (negative peer behavior) were computed as +/− 1 *SD* (1.01) and the regressions were re-run using these variables in order to examine the relations between BI and ToM performance when children displayed high vs. low levels of negative peer behavior. When children displayed negative peer behavior at 24 months, BI was negatively associated with ToM performance a year later, $\beta = -.63$, $t = -3.26$ $p = .001$. However, when children displayed low negative peer behavior at 24 months, there was no significant relation between BI and ToM performance, $\beta = .06$, $t = .34$, $p = .73$.

Post-hoc Analysis of Negative Behaviors and ToM

Although we were interested in negative peer behaviors as a whole, we wanted to examine the individual variables that made up the composite in order to probe which types of

negative behaviors might be most influential for children with heightened BI on their ToM performance. Therefore, post-hoc analyses were run, on a subset of the dataset (n =104) with complete peer behavior and ToM scores, to further examine these behaviors. Three independent t-tests were run using each variable that made up the composite of negative interaction behaviors (rejecting, grabbing, and demanding) as the independent grouping variables and ToM scores as the dependent variable. Those with high rejecting behaviors (n = 68) were more likely to perform worse on the ToM tasks than those with low rejecting behaviors (n = 36), $t(102) = 2.55$, $p = .01$. There was a trend for those who displayed more grabbing behaviors (n = 77) to have lower ToM scores than those who displayed few grabbing behaviors (n = 27), $t(102) = 1.73$, $p = .09$. Lastly, there was no difference in ToM performance for those who displayed high demanding behaviors (n = 41) than for those who displayed few demanding behaviors (n = 63), $t(102) = .91$, $p = .37$. Given these follow up results, it is assumed that BI children who displayed greater rejecting behaviors in particular were at greatest risk for poor ToM performance one year later. Additionally, it is important to note that BI children (top 50% of the sample) were not particularly more likely to display only rejecting behaviors, as 77% of high BI children displayed 2 or 3 different types of behaviors, compared with 80% of low BI children.

Discussion

The goal of the present study was to examine whether individual differences in BI and negative social interaction behaviors would influence ToM development a year later. Few studies have examined the joint roles of temperament and early social behavior in the development of ToM in young children. Results from the current study indicated that temperament and negative peer interaction behaviors jointly influenced ToM acquisition. Children with high BI who displayed high negative peer interaction behaviors at 24 months of age were less likely to pass ToM tasks at 36 months of age compared to children with high BI who displayed low negative peer interaction behaviors, whereas there was no difference in ToM scores for low behaviorally inhibited children with or without displays of negative peer interaction behaviors (See Figure 1). In addition, children with high BI and low negative peer interaction behaviors showed similar ToM scores to children with low BI.

Inhibited children often display social reticence with peers and later social withdrawal (Rubin et al., 2009), which may be exacerbated by a lack of understanding of their social environment. Thus, these findings have significant implications for understanding the emergence of social anxiety amongst those with BI. The data presented here suggest that individual differences in temperamental style influence ToM development. Children with BI are more vigilant of their environment, more socially reticent, and less likely to approach or engage others in social interaction (Fox et al., 2005). They are also less socially skilled at initiating or responding to social gestures (Rubin, Hastings, Stewart, Henderson, & Chen, 1997). As such, children with BI may have fewer opportunities to learn the skills necessary for competent ToM cognition (Fox et al., 2001). A lack of social responsivity, coupled with their initial fearful temperament, may hinder timely emergence of ToM for those with greater BI. In turn, delayed ToM emergence may result in further declines in social understanding amongst this temperamentally fearful population, potentially putting them at risk for more serious problems, such as loneliness, withdrawal, and social anxiety (Fox et al., 2005; Rubin et al., 2009).

The ability to interact with a peer in a positive manner is influenced by one's abilities to understand both social norms (i.e., don't take toy away from others) and others' beliefs and desires (i.e., the other child wants to play too). Children who show negative peer interaction behaviors may do so because they have trouble understanding social norms or others' beliefs and desires. Specifically, a child who ignores or rejects another child's bids for a toy may be

acting this way out of indifference to the social norm and/or out of an inability to understand the intentions and desires of their peer. The association between BI and social reticence may explain why rejecting a peer's initiations was the strongest negative behavior predicting ToM performance. Rejecting is an indirect behavior in which a behaviorally inhibited child could avoid social interaction with a peer, whereas grabbing and demanding require more confrontational acts toward a peer. Children who display rejecting behaviors early in development might not gain the social experiences necessary for adequate ToM development. In turn, delayed ToM might lead to poor social understanding and interaction skills later in childhood. These bidirectional relations between social behaviors and experiences and the development of ToM are crucial to a child's social development. Future research should focus on the intricacies of these relations across early childhood, especially in temperamentally vulnerable populations, such as those with BI.

There are limitations to this study that should be considered. First, while the data suggest relations between ToM performance and temperament, these relations are complex and it is possible for them to change over time. In our behaviorally inhibited population it is possible for the relations we found in toddlerhood to change throughout development, especially since socially anxious adults tend to be more vigilant rather than avoidant of social cues. Since this study does not address changes in the relations of temperament and ToM performance across development, one must interpret the findings while keeping in mind the complexity of the relations.

Second, although ToM emergence is commonly measured through performance on the tasks used in this study, there is a debate as to whether other tasks would provide earlier evidence of ToM. Recent work has claimed that young children are unable to pass these assessments due to task design (Onishi & Baillargeon, 2005). Studies using looking paradigms have been used to evaluate infants' ToM, but the conclusions are controversial (Ruffman & Perner, 2005). Future studies should examine whether there are also relations between early looking paradigms, temperament, and social behavior.

A third limitation of the current study is that the peer interactive behavior measure does not take the partnered peer's behaviors into account. For example, a child may show more negative peer interaction behaviors if his/her partner is acting uncooperative or not attending to the task at hand. In addition, the negative peer interaction behavior data was based on only a single episode of dyadic interaction, so caution should be taken when drawing conclusions. The examination of behaviors over multiple dyad interactions may provide a clearer picture as to how participants interact with peers. However, we were not predicting dyadic interactive behavior, but rather using the context of the dyad to measure individual social behavior in relation to ToM. Also, since peers were randomly assigned into dyads there is a random range of displayed peer behaviors exhibited by the non-target peers. Despite this, future work should take both children's behaviors into account when examining dyadic assessments.

In summary, behaviorally inhibited children who display negative peer interaction behaviors in a social dyad at 24 months had lower overall ToM scores at 36 months than did inhibited children who did not show negative peer behaviors or non-behaviorally inhibited children. These findings contribute to the growing literature on social development, particularly in temperamentally at-risk samples.

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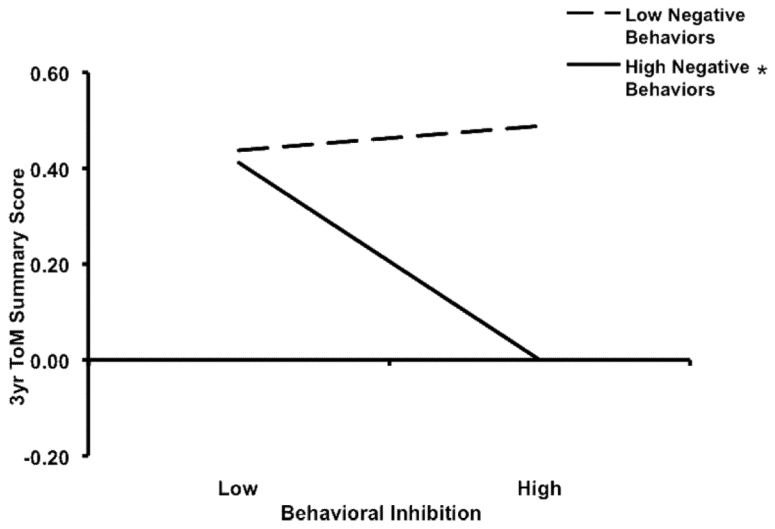

Figure 1.
Interaction effect of negative peer interaction behaviors and BI on 36-month ToM score

Table 1

24-month peer interaction code definitions

Code	Definition
Grabbing	When and object is out of reach and in the other child's possession (in his hands, in his lap, right next to him on the floor), and the initiator grabs the piece/body. A grab may be slow and involves taking of the piece/body. A grab involves taking any piece/body that is clearly not already in the initiator's possession (pieces/body laying between them on the floor does **not** count as possession).
Demanding	Initiator demands something from the other child. Initiator may demand that the child hand him a piece/body, that the child stop doing what he is doing, or that the child do it the way the initiator wants it done. Simple demands such as, "Mine!" directed at the other child count as Demand initiations when there is an implied action for the other child.
Rejecting	Child rejects the initiators request by shaking head, verbal rejection, or deliberately keeping piece/body despite clear understanding of the request.