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The Relational Significance of Misguided Actions: A Critical Review of the Early Integration Between False Belief and Emotion Understanding

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ABSTRACT

Traditional developmental research suggested a significant lag between the emergence of false belief understanding and its integration with emotion understanding. This critical review argues that such findings resulted from a combination of high computational loads in verbal tasks, a lack of ecological validity in decontextualized narratives, and a conceptual tendency to treat emotions as retrospective outcomes of a situation rather than as informative signals that help decode it. By synthesizing research utilizing implicit measures, such as looking time, proactive helping, and spontaneous facial expressions, a more coherent developmental timeline emerges. This review proposes that the early competence observed in the second year of life is best understood by viewing emotions as "relational signifiers" that highlight the relational significance of an agent's goals and constraints. Under this framework, children's social competence is grounded in a bidirectional link: while beliefs inform emotional expectations, emotional displays serve as diagnostic cues for resolving social ambiguity and reasoning about hidden mental states.

Yanıltıcı Eylemlerin İlişkisel Önemi: Yanlış İnanç ve Duygu Anlama Arasındaki Erken Bütünleşme Üzerine Eleştirel Bir İnceleme

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ÖZET

Geleneksel gelişimsel araştırmalar, yanlış inanç anlama becerisinin ortaya çıkışı ile bu becerinin duygu anlama ile bütünleşmesi arasında önemli bir zaman farkı olduğunu öne sürmüştü. Bu eleştirel inceleme, söz konusu bulguların; sözel görevlerdeki yüksek bilişsel yükten, bağlamdan kopuk anlatıların ekolojik geçerlilik eksikliğinden ve duyguları durumun çözümüne yardımcı olan bilgilendirici sinyaller yerine durumun geriye dönük sonuçları olarak görme eğiliminden kaynaklandığını savunmaktadır. Bakış süresi, proaktif yardım etme ve kendiliğinden oluşan yüz ifadeleri gibi örtük ölçümlerin kullanıldığı güncel araştırmalar sentezlendiğinde, daha tutarlı bir gelişimsel çizelge ortaya çıkmaktadır. Bu inceleme, yaşamın ikinci yılında gözlemlenen erken yetkinliğin en iyi şekilde, duyguları bir aktörün hedeflerinin ve kısıtlamalarının "ilişkisel önemini" vurgulayan "değerlendirici göstergeler" olarak görerek anlaşılabileceğini öne sürmektedir. Bu çerçeveye göre, çocukların sosyal yetkinliği çift yönlü bir bağa dayanmaktadır: İnançlar duygusal beklentileri şekillendirirken, duygusal ifadeler de sosyal belirsizlikleri gidermek ve gizli zihinsel durumlar hakkında akıl yürütmek için tanısal ipuçları işlevi görür.

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INTRODUCTION

Psychological reasoning refers to the ability to make sense of others' intentional actions, which includes understanding the mental states underlying an agent's actions, making predictions about the subsequent actions along with coordinating one's own actions in relation with the agent. (Baillargeon et al., 2016). In making sense of others' intentional behaviors, emotions provide significant cues by highlighting the relational significance of the agent and their actions (Reschke et al., 2017). For example, someone showing frustration while trying to open a door signals to the observer that the agent is failing their goal and that they might need help. From this perspective, these emotional cues serve as evaluative signifiers that allow the observer to decode the meaning of a situation based on the agent's goals and environmental constraints (Walle & Özden, 2024). This evaluative capacity constitutes a foundational element of emotional intelligence, where the ability to accurately decode affective signals is intrinsically linked to social values such as helpfulness and social responsibility (Gürler et al., 2024). Consequently, appreciating these emotional signals is essential not only for maintaining social harmony but also for navigating the risks inherent in complex social interactions (Akın & İlker, 2025). Accordingly, psychological reasoning is inherently linked with emotion understanding (Reschke et al., 2020), creating a bidirectional framework where affective displays serve as diagnostic tools for reasoning about hidden mental states and resolving social ambiguity.

Developmental research provides support that emotion understanding, and psychological reasoning are linked from early ages. Infants as young as 12 months old are able to refer to the motivational states of the agent depending on the emotional expressions accompanying agent's behaviors (Behne et al., 2005). Although there is some contrary evidence, research supports that children's appreciation of the causal link between emotions and mental states such as intentions, desires and beliefs, is present in their verbal reports. By age 3, children refer to changing motivational states and goals to explain changes in emotional experiences when talking about real-life events and narratives (Stein & Trabasso, 1992). However, it is not until roughly age 5 that they reliably provide mentalistic explanations for emotional reactions involving true and false beliefs (Parker, et al., 2007). This suggests a developmental nuance in how children map specific mental states to discrete emotions; for instance, children between 4 and 6 years old make belief-state references more frequently when explaining fear, whereas they rely on desires to explain happiness or sadness (Rieffe et al., 2005).

While these findings establish a foundational connection between affect and cognition, the most stringent test of this integration lies in an agent's "misguided" actions. In scenarios involving false beliefs, an agent's emotional reaction is not driven by the actual state of the world, but by their subjective, and mistaken, representation of it. Understanding these emotions requires the child to move beyond simple situational cues and appreciate that an agent's internal mental state can override objective reality.

The following section reviews the early body of research that first attempted to map this complex intersection where cognitive representation and affective experience meet. Despite the clear theoretical link between cognitive and affective reasoning, a critical gap exists in the literature regarding the developmental timeline of this integration. While traditional research suggested these domains were functionally separate until age 7 or 8, recent evidence hints at much earlier competence. This review seeks to address this discrepancy by examining how the transition from decontextualized verbal tasks to implicit, socially situated measures reveals a more unified and earlier emerging psychological framework.

Early Research on False Belief Based Emotions

Early research on false-belief-based emotion branched from the research that found children can predict actions of an agent based on agent's false belief. A comparable question was asked regarding emotions: can children predict an agent's emotion based on agent's false belief? Another related question was, can children appreciate the emotional expression of an agent might be different from their actual feelings? Initially, some researchers argued that false belief understanding in the affective domain was functionally identical to the physical domain. Under this view, it was expected that once children mastered the appearance-reality distinction in the physical world, they would automatically apply it to emotions (Slaughter & Gopnik, 1996; Flavell, 1993; Harris, 1992). However, because this early work focused primarily on whether children could pass or fail decontextualized verbal tests, it often neglected the bidirectional nature of the relationship. Specifically, it overlooked the possibility that emotions might serve as the very cues that help a child disambiguate the false belief of another person. Accordingly, the role of emotions in highlighting the significant relations between the characters and events, hence disambiguating false belief of another was neglected.

Predicting Emotions from False Beliefs

Early investigations into the cognitive-affective link utilized controlled, decontextualized tasks to determine if children could use an internal state to anticipate an emotional reaction. Harris et al. (1989) investigated children's expectations of an emotional reaction as a function of their understanding of an agent's false belief by presenting children between the ages of 3 to 7 with scenarios involving a "trickster" animal. Crucially, children were informed of the to-be-tricked character's favorite food before the trickster swapped the container contents in the character's absence. When the character returned to retrieve the container, holding the false belief it still held his favorite food, it was not until age 6 that children predicted the character would be happy before opening the box. This suggests that below age 6, the child's own knowledge of the actual reality prevents them from successfully taking the character's subjective, mistaken state into account.

To investigate whether this reality bias persisted even when the emotional stakes were made more explicit, researchers manipulated the valence of the character's expectations. Rieffe et al. (2000) trained 4- and 5-year-olds to recognize specific candy preferences of doll characters. In the false-belief condition, children saw a bag containing candies the character liked or disliked while the character remained unaware of the actual contents. Despite being told explicitly that the character believed the bag contained a liked candy (when it actually contained a disliked one, or vice versa), the children were biased by their own knowledge of reality, predicting emotions based on the actual contents of the bag instead of the false belief of the characters.

The procedural complexity of the narrative itself also appears to impact performance, suggesting a developmental lag between cognitive and emotional assessments. In a series of five experiments, Bradmetz and Schneider (1999) investigated this coordination, using stories like *Little Red Riding Hood*, in which the wolf wears grandmother's clothes to trick Red Riding Hood, and a modified "Maxi" change-of-location task, in which a Maxi puts his chocolate in a box and while he is away, his brother eats most and puts the rest of the chocolate in a different box. They found that even when children correctly identified that Red Riding Hood believed her grandmother was in bed, they inconsistently predicted her emotion based on the actual reality (i.e., that she is afraid because a wolf is in the bed). These results demonstrate that while children may pass standard false-belief tests around age 4, they struggle to coordinate this knowledge with emotional attributions until ages 7–8, indicating that false belief understanding and the understanding of emotional consequences of one's mistaken beliefs are only unified into a consistent system much later than the initial appearance of a false belief understanding.

The perceived reality bias in younger children may be a product of task decontextualization rather than a lack of underlying competence, indeed cross-cultural data suggests this competence is highly sensitive to the social setting. Avis and Harris (1991) conducted a study with Baka children in Cameroon using an interactive social "trick." After watching an adult place desirable food into a bowl, the child helped an experimenter hide the food in a new location while the first adult was away. When asked what the person would feel upon return, a majority of 4- and 5-year-olds, and even a minority of 3-year-olds, successfully predicted that the experimenter would feel “good” based on their false belief, rather than "bad" based on the reality of the empty bowl. While this success occurred significantly earlier than in Western samples, it remained unclear whether the results were driven by the "naturalness" of the social interaction or by specific cultural differences in how mind and emotion are understood.

To decouple the interactive nature of the task from the cultural background, researchers investigated whether this success would hold in more neutral, decontextualized settings. Vinden (1999) adopted the same core procedure but tested four different cultural groups: the Mofu, Tolai, Tainae, and a Western sample. Crucially, the tasks were moved to neutral settings, such as empty classrooms, to ensure children were not relying on situational cues. Under these conditions, children across these diverse cultures struggled significantly more than Western children to predict emotion based on beliefs, even after they had mastered false belief as it affects behavior. This performance flip suggests that while Western children may be more accustomed to the high task demands of decontextualized narrative methods, children in traditional societies rely more heavily on the "naturalness" of a social interaction to decode relational significance. Vinden (1999) argued that earlier research often relied on narrative methods that impose high task demands, which may not be optimal for different cultures. This suggests that the integration of emotion and social cognition is not just a cognitive milestone, but a situated ability; children may fail to demonstrate an integrated understanding when traditional storytelling tasks fail to provide a meaningful social context.

Understanding Deceptive Emotion Displays

Importantly, the interrelation between emotion and social cognition is bidirectional: children must not only predict emotions from beliefs but also understand how emotional displays can be strategically managed to create false beliefs in others. This was investigated using emotional appearance-reality tasks, modeled after traditional physical appearance-reality paradigms. In these tasks, children listened to stories where characters had reasons to hide their true feelings, such as receiving a disappointing gift but wanting to protect an aunt’s feelings. Consequently, the characters displayed facial expressions that were incongruent with their actual emotions.

In an early study investigating this directionality, Gross and Harris (1988) asked children to predict how the character "really feels," how they "look on their face," and what "other characters think" the protagonist feels. The results suggested that 6-year-olds could reliably distinguish between "real" and "apparent" emotion and understood that such deceptive displays would result in the creating false belief in others, so that an onlooker would think the agent’s facial expression would reflect her true feelings. In contrast, in a similar design, 4-year-olds display a much more limited grasp, though they showed an emerging ability to make this distinction specifically when hiding negative emotions (Harris et al., 1986). Collectively, these findings suggest that by age 6, children no longer view emotions as purely transparent; they see them as private mental states that can be strategically managed to influence the social world.

However, as with the active-participation study conducted by Avis and Harris (1991), the perceived "failure" of younger children in these paradigms may be a consequence of the high computational load required to mentally simulate a hidden state. Davis (2001) addressed this possibility

by providing dolls with fixed happy or sad facial expressions to provide concrete visual cues to complement the narratives. For example, a doll with a positive expression received a "yucky" gift but hid her sadness to be polite, or a doll with a negative expression felt happy that a bully fell over but hid her joy to avoid being picked on. When asked what an uninformed onlooker would think the doll felt, both 3- and 4-year-olds were remarkably successful in predicting that the observer would be misled by the doll's apparent expression. This earlier success supports the overarching theme that the integration of emotion and social cognition is present in the preschool years but is often masked by the high demand of integrating complex verbal narratives. Unlike previous designs that required children to mentally construct a character's appearance based on their motives, this paradigm provided direct visual access to the apparent emotion. These findings suggest that the fundamental ability to link deceptive displays to the creation of false beliefs is present in the early preschool years, even if it is often masked by the demands of complex verbal narratives in traditional testing.

Synthesis of Early Research: Limitations and Conceptual Shifts

In summary, earlier research has typically assigned emotions a secondary, non-interactive role in understanding false beliefs. First, emotions were viewed as a retrospective outcome of a child's understanding of a belief, rather than as an active, predictive cue that highlights the relational significance of a social scenario, the essential information that allows an observer to decode the meaning of a situation based on an agent's specific goals and constraints. Second, emotions in these paradigms were often operationalized as static physical phenomena, neglecting the fact that affect is deeply embedded in social contexts where it highlights the relational significance between agents and their actions. Consequently, the bidirectional nature of this relationship, how emotions inform beliefs and beliefs inform emotions, remained largely unexplored.

Beyond these conceptual concerns, the ecological validity of early emotional scenarios has been questioned. As Davis (2001) suggests, many of these narratives lacked personal significance; characters rarely faced real threats or significant losses, meaning there may not have been a compelling reason for them to experience a strong, trackable emotion in the first place. Furthermore, Wellman and Banerjee (1991) pointed out a critical procedural flaw: because children often learned about the true reality alongside the character, they may have been reporting their own surprise at the *reveal* rather than accurately inferring the character's internal state. These designs likely obscured the true interplay between emotion and false belief understanding by failing to create a situation where the agent’s internal state was the most salient source of information.

Finally, high task demands likely masked early competence in these traditional paradigms. By relying heavily on complex verbal narratives and puppet shows that required explicit justifications for hypothetical questions, these studies imposed a computational load that did not allow children to demonstrate their underlying abilities. Support for this possibility is found in broader emotion research, which suggests that the reliance on verbal labeling and expressive tasks can underestimate a child's underlying conceptual understanding (e.g., Özden & Walle, 2025). This same pattern is evident in the false belief domain, where moving toward implicit measures reveals that infants show an understanding that people act based on their beliefs much earlier than verbal tasks suggest (e.g., Kovacs et al., 2010; Onishi & Baillargeon, 2005; Southgate et al., 2007). The shift toward recent research reflects a move toward alternative, non-verbal measures that bypass these explicit requirements, suggesting that an integrated understanding of the link between emotion and false belief may emerge much earlier than previously thought.

Recent Research on False-Belief Based Emotions

Recent research supports that understanding of belief-based emotions is present at much earlier

ages than previously found. These studies use alternative measures such as visual attention through looking time (e.g., Scott, 2017), active behavioral responding, (e.g., Buttelmann et al., 2009; Knudsen & Liszkowski, 2012; Knudsen & Liszkowski, 2013), and children's own spontaneous facial reactions (e.g., Moll et al., 2016; Moll et al., 2017). Unlike elicited-response tasks that require verbal justifications or emotion labels, these alternative measures provide evidence that infants develop an expectation of the causal link between a partner's emotional reaction and their false belief as early as their first birthday. By prioritizing what infants perceive and anticipate, this research reveals a foundational integrated psychological framework for understanding the emotional consequences of mistaken reality.

Predicting Emotions from False Beliefs

To investigate whether infants possess an implicit expectation of how beliefs shape emotions, Scott (2017) utilized a violation-of-expectancy paradigm, measuring looking time to detect when an infant's expectations are contradicted. Across three experiments, 20-month-old infants watched an agent interact with objects that had desirable properties, such as a rattling toy or a container holding an attractive toy. Later, while the agent was away, the objects were surreptitiously altered so the rattling toy became silent or the container was emptied, leaving the returning agent with a false belief.

The results showed that infants looked significantly longer when the agent expressed happiness compared to when she expressed surprise upon discovering that she was mistaken about the object properties or mistaken that an object contained her liked toy. Crucially, this expectation of surprise was absent when the agent was merely ignorant of the object's properties rather than holding a specific false belief. This suggests that as early as 20 months, infants possess an integrated psychological framework that allows them to form specific expectations about the emotional consequences of false beliefs.

Predicting False Beliefs from Emotional Displays

The bidirectional relationship between these domains also allows for backward inferencing: the ability to use an observed emotional reaction to reason about an agent's prior beliefs. This transition from predicting emotions to inferring beliefs represents a significant cognitive step; while 20-month-olds can implicitly anticipate an emotional outcome from a known belief, backward inferencing requires the child to treat the emotion as a diagnostic cue to reconstruct a past, hidden mental state. In this direction, the child must resolve ambiguity regarding what the agent previously knew by working backward from the observed affective display. A key study explored this ability using a paradigm where children watched an agent display a happy or sad expression after a "helpful but fallible" bunny whispered to the agent about the contents of an opaque box (Wu & Schulz, 2018). When the box was opened and the agent's emotion changed, for instance, shifting from happy to sad upon seeing the actual contents, 5-year-olds, but not 4-year-olds, successfully reasoned that the agent must have held a prior false belief about the contents of the box based on the bunny's incorrect information.

A similar backward inferencing logic was applied to a modified Sally-Anne task (Wu et al., 2018). Identical to the traditional procedure (Baron-Cohen et al., 1985), Sally placed her toy in a box and left, after which the toy was moved. The critical variable in this modified task was inclusion of a window through which Sally might have observed the relocation. Upon her return, Sally displayed a specific emotion: she was either angry, suggesting that she witnessed the change, or happy, suggesting that she remained unaware and hence, held a false belief. Results showed that 5- and 6-year-olds used these affective cues to predict Sally's behavior. When Sally was happy, they predicted she would search in the original (wrong) location; when she was angry, they predicted she would look in the new (correct) location. These findings indicate that by age 5, children recognize the relational significance of emotions like anger and happiness, using valence changes to resolve social ambiguities and reconstruct an agent's knowledge. Together, these findings demonstrate that by age five, the interrelation between emotion and

social cognition serves as a flexible tool for navigating social interactions.

While this direction of reasoning, working from a visible emotional effect back to a hidden mental cause, is present in 5-year-olds, it remains an open question whether younger children possess an implicit version of this skill. To date, backward inferencing paradigms have relied on explicit verbal tasks, which may mask earlier competence in the same way traditional false-belief tasks did. Future research utilizing non-verbal, implicit measures is needed to determine if the building blocks for backward inferencing are present in infancy, alongside the forward-predictive expectations observed in 20-month-olds. Nonetheless, for the preschooler, treating valence changes as informative signals allows them to treat emotions as reliable windows into a partner's internal state. This capability indicates that the integration of these domains is not just for predicting what will happen but is vital for resolving the social ambiguities that occur when one person knows more than another.

Behavioral Responding Based on Emotion and False Belief Understanding

Beyond passive expectations or verbal reasoning, another robust piece of evidence of early competence lies in an infant's ability to use their understanding of the belief-emotion link to inform helpful, proactive behavior. To intervene, an infant must not only predict a mistaken action but also evaluate its emotional consequences and proactively coordinate their own behavior to alter that outcome. Knudsen and Liszkowski (2012) employed an anticipatory-intervention paradigm to investigate whether 18-month-olds could integrate these domains to prevent a social partner's distress. In this study, infants watched as an experimenter expressed disgust toward a specific object. While the agent was away, her desirable toy was removed from its container and replaced with this aversive object, creating a scenario where the agent would have a false belief about the container's contents upon her return. When the agent returned and approached the containers, infants spontaneously informed an agent about an aversive object when she falsely believed her toy was located there instead. Crucially, this help was specifically informed by the agent's mistaken belief rather than mere ignorance; in control conditions where the agent was merely unaware, infants intervened significantly less.

These findings extend to 12-month-old infants, who observed an agent play with a toy by putting marbles in it. When the agent wanted to reach to the marbles in the tray, she discovered a foreign object on the way and expressed disgust or pain or pleasant surprise and subsequently, put the object away. Infants then watched a second agent take the object from the hidden spot and put it in the same spot that the first experimenter moved it from while she was away. This location was only visible to the infants but not the experimenter. Following these events, the first agent returned and said she wanted to play with her toy, unaware of the presence of the object in the way. Results showed that, when the agent previously expressed disgust or pain towards the object, 12- and 18-month-olds spontaneously pointed to warn the agent of the presence of the object (Knudsen & Liszkowski, 2013). To succeed, infants had to appreciate that the agent's false belief would lead her to the wrong container, anticipate the resulting distress, and realize that a preemptive intervention could protect her. This demonstrates that by one year of age, infants appreciate the causal link between an agent's false belief and the negative emotional experience that would result from acting upon it. They do not just track facts; they strategically communicate to protect a partner from an anticipated aversive encounter.

Whereas the previous studies focused on infants preventing a negative outcome, instrumental helping paradigms demonstrate that infants also use this belief-emotion link to facilitate a partner's goals. In Buttelmann et al. (2009), an experimenter placed their toy in one of two boxes; subsequently, a second experimenter moved the toy while the first experimenter was either out of the room or stayed to witness the switch. Therefore, the first experimenter either had a false belief or true belief about the location of the toy correspondingly. In both conditions, the experimenter tried to open the now empty

box. Results showed that in the false-belief condition, infants were able to infer that the experimenter was trying to obtain his liked toy, but he didn't know that it was in the other box. Accordingly, they helped him open the correct box that contained the toy. Conversely, in true-belief conditions, infants helped the agent open the empty box he was actually reaching for, recognizing he must have had a different motive since he saw the toy being moved.

While not the primary goal of the original study, this task inherently relies on the child's appreciation of the relational significance of the toy for the experimenter. To provide appropriate help, the child must recognize the experimenter's prior positive affect toward the toy and their current frustration with the locked box. The infant is not simply tracking object location; they are tracking the emotional history between the agent and the object to disambiguate the agent's current intent.

Beyond proactive helping, the interrelation of these domains is evident in children's own spontaneous emotional reactions when witnessing an agent about to act on a false belief. In studies utilizing puppet shows involving changes of location, identity, or quantity, 3-year-olds displayed clear facial expressions of suspense, such as lip-biting, brow-furrowing, or pressing their hands over their mouths, as a character approached a "tricked" scenario (Moll et al., 2016). For example, in one scenario, a puppet viewed the contents of two opaque boxes, one containing a "cute bunny" and the other "scary spiders", before leaving the scene. While the puppet was away, an antagonist swapped the contents. Upon returning, the first puppet reached for the box she falsely believed contained the bunny, stating her intent to play with it, picked up the box and left the scene. This anticipatory suspense, recently observed in children as young as 2.5 years old (Moll et al., 2017), occurs even when the character never actually opens the box on stage. This suggests that by age 2.5 to 3, children do not just cognitively track a false belief; they are affectively attuned to the disappointment or unpleasant surprise that will inevitably result from it.

While these interactive paradigms provide compelling evidence of early competence, the interpretation of these findings remains a subject of academic discussion. Critics have raised concerns regarding the replicability of some helping tasks and suggest that success may be driven by simpler mechanisms, such as the physical saliency of objects or teleological reasoning (e.g., Allen, 2015; Priewasser et al., 2018; Ruffman, 2014), calculating the most efficient way to achieve a goal without necessarily attributing internal mental states. However, from the perspective of the current review, these situational and affective cues are not mere "shortcuts" to be dismissed. Instead, they represent the foundational signifiers of relational significance. They provide the essential information that allow infants and young children to decode the psychological meaning of a social interaction before they possess the verbal sophistication to pass traditional false-belief tasks. By integrating behavioral responding, spontaneous emotional reactions, and backward inferencing, a clearer picture emerges: the child's ability to coordinate social outcomes is inextricably linked to their understanding of a partner's emotional state.

CONCLUSION

As established throughout this review, the primary function of both emotion understanding and false-belief understanding is to enable children to relate to their social environment in a meaningful way. By situating the child within dynamic social contexts, a recently growing, albeit limited body of work, successfully highlighted the bidirectional relationship between these domains, showing how they inform a child's own emotional and behavioral responses to social partners. Whether through the anticipatory suspense of an observer or the active intervention of a helper, these paradigms allow children to demonstrate a sophisticated grasp of significant social relations long before they can provide verbal justifications.

This integrated framework suggests that children do not respond to emotions as isolated labels, but as complex, evaluative states deeply rooted in the relational meaning of a social encounter. Functionally, the integration of affective and cognitive reasoning is vital for navigating the social world and mitigating adverse interpersonal outcomes. Supporting this, recent empirical evidence suggests that social-emotional competencies serve as significant protective factors in social environments (Akın & İlker, 2025). While children utilize an agent's beliefs to anticipate the emotional consequences of mistaken reality, they also treat observed emotions as "reliable windows" into a partner's internal state, thereby reconstructing what that person knows or believes. The literature summarized here suggests that a child's early competence is fundamentally grounded in their ability to appreciate the affective implications of a partner's mistaken reality. Ultimately, by treating emotions as evaluative signifiers, children demonstrate that the coordination of social outcomes is inextricably linked to their understanding of the human experience.

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