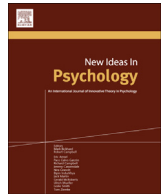




ELSEVIER

Contents lists available at ScienceDirect

New Ideas in Psychology

journal homepage: www.elsevier.com/locate/newideapsych

How to help: Can more active behavioral measures help transcend the infant false-belief debate?



Jedediah W.P. Allen

Bilkent University, Department of Psychology, Ankara 06800, Turkey

ARTICLE INFO

Article history:

Received 14 May 2015

Received in revised form

24 July 2015

Accepted 25 July 2015

Available online 6 August 2015

Keywords:

Social situations

False-belief

Mindreading framework

Action-based framework

Preschoolers

ABSTRACT

The use of looking time procedures for the claim that infants understand other's false-beliefs has drawn criticism. In response, Buttelmann, Carpenter, and Tomasello (2009) have argued for the use of a more active behavioral measure involving children's willingness to help others. However, the current study challenges Buttelmann et al.'s response on both theoretical and methodological grounds. Theoretically, Buttelmann et al. take a mindreading framework for granted and are thus committed to the same type of "rich" interpretations that have accompanied infant looking procedures more broadly. Methodologically, the current study challenges Buttelmann et al.'s interpretation that children were using the adult's false-belief to determine how to help in this paradigm. To test our alternative perspective, mentalistic and non-mentalistic interpretations of preschooler's helping behavior were compared. In the original study, the adult's false-belief was conflated with the playing of a trick. When these two factors were separated, children's helping behavior was not consistent with the adult's false-belief. Second, when the situation was characterized in terms of a hiding scenario (instead of playing a trick), older children altered their helping behavior accordingly. Together, these results provided evidence that children in the active-helping paradigm did not use the adult's false-belief to determine how to help and that the broader social situation is an important variable for understanding other's actions. In conclusion, the use of more active behavioral measures alone does not resolve the controversy that has played out with respect to infant looking procedures. Instead, any adequate methodological modifications must be accompanied by theoretical considerations as well.

© 2015 Elsevier Ltd. All rights reserved.

There is growing support for the conclusion that infants possess a rudimentary understanding of other people's beliefs as representational states. The empirical basis for this conclusion comes from looking time studies indicating that infants are able to pass "age-appropriate" False-Belief (FB) tasks (Onishi & Baillargeon, 2005; Surian, Caldi, & Sperber, 2007). However, the ability to reason about another person's false-beliefs has traditionally been assumed to develop during the preschool years (Wellman, Cross, & Watson, 2001). Therefore, a new theory of mind debate exists about whether these early looking methodologies involve the need to attribute false beliefs to others or not (Low & Perner, 2012; Ruffman, Taumoepeau, & Perkins, 2012; Stone, Caramazza, Sugarman, & Martin, 2012). One well-developed proposal against early belief attribution offers a new theoretical perspective in which looking procedures are interpreted as only demonstrating

the tracking of "belief-like" states with certain signature limits (Apperly & Butterfill, 2009; Low & Watts, 2013).

An alternative approach – in favor of early belief attribution – proposes that the creation of new methodologies can provide less controversial evidence for early false-belief understanding by avoiding the use of looking times altogether (Buttelmann, Carpenter, & Tomasello, 2009). Specifically, Buttelmann et al. argue that "active behavioral measures should be highly relevant – or even crucial" (p. 338) in order to transcend the controversy surrounding infant looking procedures. The rational underlying active action procedures is that they should involve some sort of interactive participation that is based on the child's understanding of the experimental situation (Meltzoff, 1995).

Although the creation of new, more active, methodologies is a productive addition to more passive looking procedures, the current article aims to demonstrate the sense in which these new active procedures face the same methodological challenges as looking procedures. The underlying commonality is not inherent to

E-mail addresses: jallen@bilkent.edu.tr, jedediahwpallen@gmail.com.

the procedures themselves, but rather, is a consequence of the researchers' theoretical openness to "rich" interpretations of data (Haith & Benson, 1998). Infant research involving rich interpretations has tended to exclude alternative theoretical perspectives through their methodology. Specifically, through the design of studies that do not include the *type* of control conditions that would be motivated from within those alternative theoretical perspectives. Thus, the lack of such control conditions is a manifestation of underlying theoretical commitments that are often times not shared by opponents in what are assumed to be empirical debates (Allen & Bickhard, 2013a; Müller & Giesbrecht, 2008; Müller & Overton, 1998).

In the realm of social-cognition, empirical research has tended to take a mindreading framework for granted (Andrews, 2012; Ratcliffe, 2007). Experimentally, this mindreading assumption manifests as an exploration of which mental-states are operative at what ages rather than as the testing of alternative (non-mentalistic) interpretations for how children understand others' actions (Huang, Heyes, & Charman, 2002; Ruffman et al., 2012; Sirois & Jackson, 2007). It is typically assumed that if children understand the *meaning* of a social situation as involving more than just "perceptual surface structure" (i.e., behavior), then such understanding *must* indicate some form of "conceptual deep structure" (i.e., mindreading, see Allen & Bickhard, 2013b). This assumption systematically misguides experimental design such that *success* on a task is taken as evidence for mindreading and *failure* is interpreted as the inability to mindread. For example, researchers assume that if children preferentially imitate the intentional actions of an adult model ("success"), then they are engaging in some form of mindreading (Carpenter, Akhtar, & Tomasello, 1998; Meltzoff, 1995). However, there are other perspectives on how children (and adults) can understand the intentionality of actions without engaging in *any* form of mental-state attribution (Carpendale & Lewis, 2015; Gergely & Csibra, 2003; Marken, 2002; Raczaszek-Leonardi, Nomikou, & Rohlfing, 2013). Importantly, these perspectives are not advocating for a behaviorist approach. Rather, they are non-mindreading ways of capturing how people understand the meaningfulness of intentional action. That is, they are non-mindreading ways of capturing how people represent the "conceptual deep structure". Accordingly, empirical demonstrations that children will differentially imitate intentional versus unintentional actions does not in itself indicate whether these children are engaging in mindreading.

Methodologically, taking a mindreading framework for granted means that there is minimal consideration for the possibility that task success could be based on the salient affordances of the agents/objects involved and/or from expectations based on the broader social situation. For example, Huang et al. (2002), Huang and Charman (2005) introduced control conditions for Meltzoff's (1995) imitation study in order to test mentalistic versus non-mentalistic interpretations of infants' behavior. In these studies, they provided compelling evidence to suggest that dynamic object affordances were sufficient to explain infants' performance from the original study. Further, when the same procedure was used with 3.5-year-olds, those children violated the criteria used to conclude that 18-month-olds were mindreading (i.e., they copied the literal actions of the adult model, see Huang, Heyes, & Charman, 2006). This latter finding highlights the utility of extending the age-ranges used for collecting data about children's performance on tasks with controversial interpretations.

The issue is not whether mindreading research has included numerous possible control conditions for a given study but whether such research has included the *type* of control conditions that are motivated from within a non-mentalistic perspective (Huang et al., 2002; Ruffman et al., 2012; Sirois & Jackson, 2007).

Mindreading research often produces experimental evidence that is *consistent* with a mentalistic framework but does not test that stance against alternative non-mentalistic interpretations. To clarify, non-mentalistic perspectives include both empiricist-behaviorist approaches and action-based approaches.

Most of the empirical response to mentalistic interpretations comes from researchers operating from within an empiricist-behaviorist perspective. Part of the reason for this is a consequence of the influence that animal research has had on developmental psychology. However, there is a deeper connection between "rich" mentalistic interpretations and "lean" behavioral interpretations of experimental performances. Both sides of this debate are committed to the same theoretical assumption regarding the split between perceptually given behavior and perceptually hidden mentality. The "rich" mentalistic camp tends to argue that understanding meaning (through mindreading) is necessary to explain performance on a given task while the "lean" behavioral camp tends to argue that understanding behavior is enough. This is mostly a methodological debate in which "lean" researchers demand stricter methodological criteria for making mentalistic conclusions (Perner, 2010; Povinelli & Vonk, 2003; Ruffman et al., 2012).

Perner (2010) is explicit that behavior-rules are not "mind-blind"; however, it is unclear how to both avoid a mindreading framework and adequately explain the meaningfulness of action without adopting an action-based framework toward knowledge and social-understanding more broadly (Allen & Bickhard, 2013a, b; Carpendale & Lewis, 2006, 2015). From an action-based perspective there is no split between surface behavior and hidden mentality but that difference is not essential for methodological critique about the diagnostic adequacy of experimental design. Thus, an action-based approach and an empiricist-behaviorist approach are united in their methodological criticisms of mentalistic research while being opposed to each other with respect to theoretical and explanatory considerations (Carpendale, Atwood, & Kettner, 2013).

The origins of the methodological differences between "rich" and "lean" interpretations can be traced back to why false-belief plays such an important role in theory of mind research. Part of the diagnostic power of the original Maxi task was that it seemed to test mentalistic and non-mentalistic perspectives (see commentaries in response to Premack & Woodruff, 1978; Wimmer & Perner, 1983). Specifically, the original study sought to tease apart responses based on the child's perspective from those based on Maxi's (i.e., Maxi's false representation of the situation). It is in the false-belief situation (i.e., when Maxi doesn't know that the chocolate has been moved) that these two perspectives have different implications for where Maxi *should* look. A further aspect of this task that has not tended to be the focus of discussion concerns the relative novelty involved. In general, the novelty of a task is going to reduce the possibility that children are generalizing from relevantly similar experiences (Andrews, 2012; Povinelli & Vonk, 2003). Therefore, it is in the false-belief situation that we get the differential behavior of children who are reasoning about Maxi's false-belief perspective from those who are using their own perspective.

The current point is not to argue that the Maxi task succeeds in being diagnostically definitive. Instead, the point is to illustrate that the focus on false-beliefs was derivative from concerns about diagnostic adequacy – i.e., testing mentalistic and non-mentalistic alternative interpretations. In contrast, contemporary social-cognition research tends to assume a mentalistic framework and empirical efforts are geared toward demonstrating mindreading abilities for different mental-states earlier than prior research. While the "descriptive" function of such studies is an important contribution to developmental research, such a strategy is more

Download English Version:

<https://daneshyari.com/en/article/6811034>

Download Persian Version:

<https://daneshyari.com/article/6811034>

[Daneshyari.com](https://daneshyari.com)