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Comment: The Paradox of Parsimony in Motivated Distance Perception

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Abstract

The motivated distance perception theory (Balcetis, 2015) paradoxically is too parsimonious to account for a variety of findings, including those of the author. The theory poorly defines the features of eliciting situations, which fails to constrain the theory making it non-falsifiable and allows for post-hoc interpretation of the effects. Finally, the theory ignores the complexity of the motivational system and the automaticity of motivations.

Comment: The Paradox of Parsimony in Motivated Distance Perception

The motivated distance perception theory is quite parsimonious (approach = closer; avoidance = farther); however, there are several concerns that limit its utility. First, there is a lack of clarity in defining the eliciting features that shift perceivers' motivational direction. Second, the theory fails to recognize the complexity of the motivational systems and its core principles. Third, the theory ignores the importance of assessing both relative and absolute measures of distance to stimuli. Overall, the theory has limited predictability, it is not falsifiable, and more importantly it fails to account for and explain perceptual biases.

Parsimony and Predictability

Why is it important to provide a more comprehensive theory that clearly identifies the features of eliciting situations? Because it can lead to post-hoc interpretation as exhibited by the author. For instance, Cole, Balcetis, and Dunning (2013) argued that spiders evoke avoidance tendencies, but in the present review when discussing the same data the author suggests that spiders evoke approach-oriented tendencies. Thus, the data, rather than the theory, seem to determine the motivational direction. The theory, unfortunately, allows for this convenient switch in motivation by having the 'features of eliciting situations' precede the motivation stage, which implies that the situation governs motivation. This implication, however, ignores a core principle of motivation: emotions, such as fear and disgust, *automatically* evoke a motivation tendency (Cisler et al., 2009). A person who sees a spider will automatically activate an avoidance tendency, thus how does avoidance become approach? To resolve this paradox, the model should incorporate an appraisal mechanism that either runs parallel to or after the automatic activation of the motivational tendency. Otherwise, eliciting features of situations will drive motivation, which contradicts the authors own theoretical argument.

Limiting motivation to the global behaviors of approach and avoid is too simplistic and fails to capture the complexity of the motivational system. Given the data in the review and using a simplistic motivational model, the theory cannot account for why disgust and fear, two avoidant motivations, produced proximal and distal biases and accurate perception. But, the theory could account for the data better if perception was influenced by sub-behaviors of avoidance (fight, flight, freezing; Corr & McNaughton, 2012), which can increase the flexibility of the model, but maintain predictability. Avoidance behaviors that evoke fight, flight, or freezing could bias perception proximally, distally, and accurately, respectively. Moreover, the theory lacks a clear prediction for conflict between the two motivational systems even though motivational theories suggest that conflict produces cautious approach. Unfortunately, the author uses conflict to justify non-predicted results (i.e., disgust).

Eliciting Features

Greater clarity is required when defining features of eliciting situations and how those features bias motivation and perception. For instance, the author presents contradictory results for how the availability of resources influence perception. Specifically, threat without the ability to escape leads to proximal estimates when resources are depleted (Cole et al., 2013; Harber et al., 2011) and when resources are ample (Cesario et al., 2014). Elsewhere in the review, individuals threated and who have available resources evoke both accurate (Harber et al., 2011) and proximal (Cesario et al., 2010) estimates. Thus, a lack of clarity allows for all situational factors to be freely interpreted creating a non-falsifiable theory.

Measurement Issues

The motivated perception theory fails to provide recommendations for how perceptual estimates should be measured, which impacts the reliability and validity of the results. When

identifying motivated perception effects, there should be at least two analyses conducted. First, the "motivated" stimulus must be compared to a control stimulus. Second, the "motivated" stimulus must be compared to the motivated stimulus' actual distance. In much of the work reported, the motivated stimulus was never compared to the actual distance. Interestingly, motivated stimuli that appeared proximal to a control stimulus were sometimes perceived to be proximal to itself and sometimes perceived accurately to itself (Balcetis & Dunning, 2010; Cole & Balcetis, 2013). Should we assume that these effects shared the same underlying mechanism? Was a confounding variable present in one situation, but not the other? Failure to provide clarity for how to reconcile these inconsistencies reduce the validity and reliability of the effects and the underlying theory.

Concluding Remarks

The motivated distance perception theory provides less clarity and understanding for why motivation influences perception than other functional accounts of perception (e.g., Proffitt, 2006).

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