

Approach and Avoidance Motivation: Issues and Advances

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One of the most fundamental, widely embraced concepts in the study of emotion is that of approach and avoidance motivation. Many eminent theorists have argued that emotional stimuli elicit two different types of behavior or behavioral inclinations, with appetitive stimuli affecting approach and aversive stimuli affecting avoidance (for an overview see Elliot, 2008). This basic idea is central to nearly every influential model of emotion and behavior, and the field has experienced an explosion of research in this area (see Figure 1). However, much of this research is only loosely connected to other research, and is encapsulated within research programs that differ in theoretical background, methodology, and choice of research paradigms. Furthermore, investigators from the various fields seem often to be unaware of each other's conceptualizations and methods. As a consequence, a broad, integrative discussion (and, perhaps, debate) about conceptualization, operationalization, and inference regarding approach and avoidance behavior is lacking to date, limiting communication between, and scientific progress across, different research programs in this area of inquiry.

The Conceptualization Issue

The experimental study of approach- and avoidance-motivated behavior is currently dominated by two basic lines of research. One is centered on the modulation of behavioral reflexes (e.g., the blink reflex) and physiological responses by emotional stimuli; here, approach and avoidance are viewed as patterned *reactions* to emotional stimuli that engage primitive motive circuits (the *reflex-oriented view*; e.g., Lang & Bradley, 2010). The other is centered on instrumental *actions* that vary in complexity, time, and effectors; according to this research line, approach and avoidance are governed by (often nonconscious) motives or goals that orient or direct behavior towards or away from

(un)desired states (the *action-oriented view*; e.g., Carver & Scheier, 1998; Elliot, 1999). Although this dichotomy is obviously a bit of an oversimplification, we think it is useful to highlight that there are quite different approaches to studying behavioral manifestations of approach and avoidance that differ in their "unit of behavior analysis." Furthermore, many researchers believe that these levels of behavior control are synchronized with each other, as reflected in the popular idea of central approach and avoidance motivational circuits. However, systematic studies of response coherence are rare, and integrative models are clearly needed on this issue. In short, conceptualizations of approach–avoidance range from simple, reflexive responses to complex, deliberate actions, and to date it is not entirely clear how these different types of approach and avoidance are orchestrated in behavior control.

The Operationalization Issue

The conceptualization issue is also reflected in the considerable variability in operationalizations of approach- and avoidance-motivated behavior in the research literature. Common measures of approach and avoidance tendencies range from electrical potentials of simple reflexes (e.g., Bradley, Codispoti, Cuthbert, & Lang, 2001) to the movement speed of a virtual manikin on a computer screen (e.g., De Houwer, Crombez, Baeyens, & Hermans, 2001), and it is not clear, at present, how these different measures are related to each other. Empirical studies on relations between different types of approach–avoidance reactions within levels of behavioral analysis are also quite rare. For instance, research has independently demonstrated emotional modulation of the startle reflex (e.g., Bradley et al., 2001) and the nociceptive withdrawal reflex (e.g., Rhudy, Williams, McCabe, Nguyen, & Rambo, 2005), but no study has investigated connections between

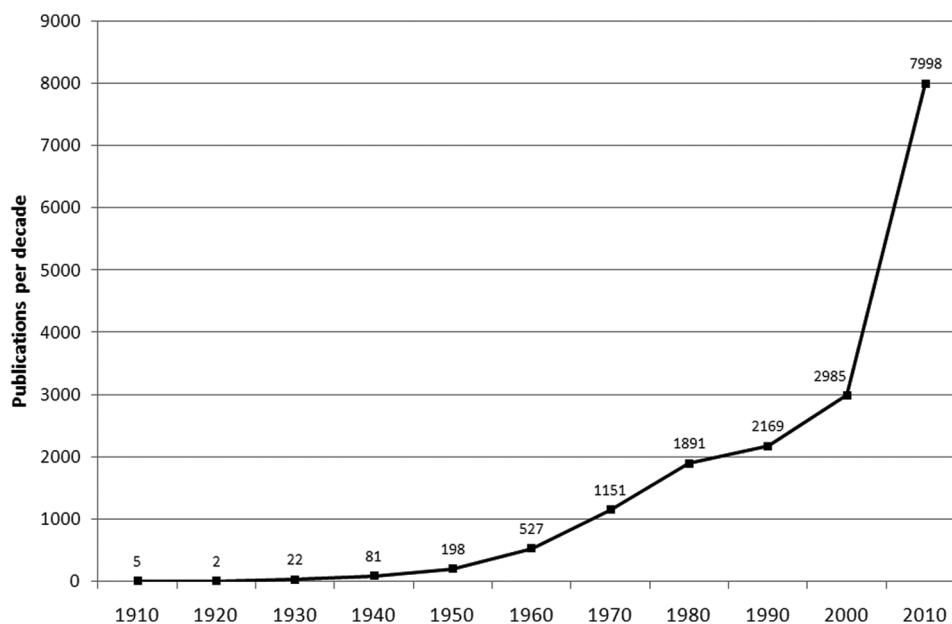


Figure 1. Scientific publications per decade on approach and avoidance motivation. Numbers were retrieved from a combined literature search with the search term “((approach OR avoidance) AND motivation) OR ((appetitive OR aversive) AND motivation) OR ((reward OR punishment) AND motivation)” in the databases PsycInfo, PsycARTICLES, and Psychology & Behavioral Sciences Collection (EBSCOhost).

both types of defensive responses to date. Such lack of cross-talk within and between different levels of behavioral analysis limits scientific insight into more general principles of approach and avoidance motivations, thereby contributing to fragmentation in the field.

The Inference Issue

Researchers frequently infer motivational states of approach and avoidance from observed behavior. These motivational states are then used to explain a propensity to approach or avoid in a given situation. Even though the idea of two central motivational systems has a long history and is bolstered by many empirical studies (see e.g., Dickinson & Dearing, 1979; Elliot & Thrash, 2002), its unconstrained use as an explanatory concept is not without peril. First, motivational explanations of approach and avoidance tendencies are circular when the motivational state is exclusively inferred from the behavior it is supposed to explain. Second, these inferences clearly depend on which behavior is measured (Eder & Rothermund, 2008). For instance, Wilkowski and Meier (2010) inferred anger-related approach motivation from faster approach movements towards angry facial expressions (relative to avoidance movements away from such displays). Springer, Rosas, McGetrick, and Bowers (2007), on the other hand, argued that viewing angry faces is associated with heightened defensive activation (startle response). Still other researchers have provided evidence that angry faces can evoke approach or avoidance motivational reactions, depending on individual difference characteristics, hormonal levels, etcetera (van Honk & Schutter, 2007). This latter work speaks to the complexity of approach–avoidance tendencies in response to

the same stimulus, and illustrates how the inclusion of other independent markers of motivation is needed in research on motivational direction.

The Special Section

This special section collects different viewpoints relevant to one or more of these issues, in an attempt to stimulate a broader discussion across laboratories and subdisciplines in the field. The collection is clearly interdisciplinary: Researchers from biological, cognitive, and social-personality areas of psychology present their ideas in 14 short articles. A concluding paper (Elliot, Eder, & Harmon-Jones, 2013) summarizes the convergence and divergence of viewpoints that are expressed in the contributions to the issue. By highlighting convergence among different research approaches, we hope that this special section will serve as a guidepost for future research and an impetus for integration in this rapidly expanding field.

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