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Why Do People Believe What They Do? A Functionalist Perspective

Matthew Tyler Boden,

Center for Health Care Evaluation, Veterans Affairs Palo Alto Health Care System

Howard Berenbaum,

Department of Psychology, University of Illinois at Urbana-Champaign

James J. Gross

Department of Psychology, Stanford University

Abstract

Why do people believe what they do? Scholars and laypeople alike tend to answer this question by focusing on the representational functions of beliefs (i.e., representing the world accurately). However, a growing body of theory and research indicates that beliefs also can serve important hedonic functions (i.e., decreasing/increasing negative or positive emotional states). In this manuscript, we describe: (1) the features of belief, (2) the functions served by beliefs, with a focus on the hedonic function, (3) an integrative framework highlighting the hedonic function and contrasting it with the representational function, (4) the implications of our framework, and related future research directions for individual differences in belief, belief change, and the ways in which beliefs contribute to adaptive versus maladaptive psychological functioning.

Keywords

Belief; emotion regulation; function; functionalist; belief change

Believing is arguably one of the most important things we do. Our beliefs are a core aspect of our identity (Heine, Proulx & Vohs, 2006; James, 1902/2002), they define and shape our relationships with other people (Jost, 2006; also see Wyer & Albarracin, 2005), and enhance our ability to survive by making the world more predictable (Barlow, 2001). Beliefs affect nearly everything we do, from basic *perceptual processes* (Yuille & Kerstein, 2006) to *cognition* (e.g., Dube, Rotello, & Heit, 2010; Risen & Gilovich, 2008; Wyer & Hartwick, 1984) and *behavior* (Fishbein & Ajzen, 1975; Dweck & Leggett, 1988). Beliefs also influence when we feel *emotions*, as well as the particular type and intensity of emotions we experience (Boden & Berenbaum, 2010; Clore & Gasper, 2000; Frijda & Mesquita, 2000). It is thus not surprising that we consider beliefs to be an important part of who we are (Abelson, 1986; Heine et al., 2006; Wyer & Albarracin, 2005).

Personality psychologists study several types of beliefs, including expectancies (i.e., anticipatory beliefs about a particular state of affairs; Bandura, 1977) and implicit theories (i.e., general tacit beliefs of the self and world: see Briñol, Petty & Barden, 2007; Dweck, 1999; Haidt 2001). Social psychologists study beliefs with specific content, such as religious (Kay, Gaucher, McGregor & Nash, 2010) and political beliefs (Jost & Hunyady, 2002). Clinical psychologists study beliefs characteristic of psychopathology, including delusions (Maher, 1988) and negatively biased, inaccurate, and rigid beliefs (i.e., “core” beliefs, schemas) associated with depressive and anxiety disorders (Riso, du Toit, Stein, & Young, 2007). Developmental psychologists study developmental processes that enable people to mentally represent information (to engage in believing; Ganea, Shutts, Spelke, & DeLoache, 2007; Onishi & Baillargeon, 2005), and beliefs about other peoples' mental states, or theory of mind (Wellman, Cross & Watson, 2001).

Across these subfields, one perennial question is why people believe what they do. To answer this question, scholars and laypeople alike have tended to focus on the representational functions of beliefs (i.e., representing the world accurately). Yet, a growing body of theory and research indicates that beliefs also can serve important hedonic functions (i.e., regulating emotions in valued directions), and do so in ways that compliment or compete with fulfillment of other functions, such as the representational function. Although the hedonic function of beliefs has intermittently come into view, this function and its implications has yet to be fully analyzed as have other functions (e.g., beliefs serving as valued possessions; Abelson, 1986).

This is unfortunate, as examining beliefs through the lens of the hedonic function may help to explain why many people strongly hold beliefs that are relatively normative but supported by little empirical or scientific evidence or are contradicted by evidence (e.g., ~75% of Americans believe in the paranormal, such as communication with the dead; Moore, 2005), beliefs they recognize might be false (e.g., “I consistently act in the interest of others rather than myself”; see Triandis, 2009), and beliefs that directly contradict other beliefs they hold (e.g., a rational materialist who believes in an afterlife). We argue that people hold these and many other types of beliefs (e.g., delusions and other maladaptive beliefs characteristic of mental disorders) because there are trade-offs among the functions served by beliefs.

Features and Functions of Beliefs

From the earliest days of psychology, beliefs have been a topic of psychological investigation (James, 1909/2002). Here we describe the features and functions of beliefs.

Features of Beliefs

Consistent with an extensive philosophical literature on beliefs (see Schwitzgebel, 2011 for an overview), three primary features of beliefs have been distinguished by psychological scientists (e.g., Fishbein & Ajzen, 1975; Wyer & Albarracin, 2005).

First, beliefs are mental representations of semantic content that are equivalent to expressions of natural language (Pitt, 2013). Belief content is infinitely variable. Each person has a large number of beliefs and the potential to form an unlimited number of new

beliefs based on experience. Some refer to concrete, self-evident phenomena (e.g., “If I lean against a wall, I will not fall”), and are similar to “basic” beliefs in the philosophy literature concerning epistemology (Klein, 1998; 2005). Other beliefs refer to abstract phenomena (e.g., “The world is a dangerous place”) that cannot be conclusively tested for accuracy, and are similar to “inferred” beliefs in the philosophical literature on epistemology (Klein, 1998; 2005).

Second, beliefs are held with varying degrees of conviction (i.e., subjective probability; Fishbein & Ajzen, 1975). Although conviction varies across beliefs (e.g., Abelson, 1988; Appelbaum, Robbins, & Vasselinov, 2004; Inzlicht, McGregor, Hirsh, & Nash, 2009), without some conviction one does not have a belief, but instead has another type of mental representation (e.g., thought, idea, hypothesis; also see Boden & Berenbaum, 2010; Gilbert, 1991).

Third, beliefs are dynamic rather than static. Once formed, both the content and level of conviction of beliefs can change. Beliefs need not be conscious. They can be activated from a state in which they are not consciously attended to one in which they are (Boden & Gross, 2013).

Functions of Beliefs

From a functionalist perspective (Cummins, 1975; Wright, 1973), the beliefs one holds are those that are intended to and potentially serve particular functions and achieve particular goals. Theorists and researchers have described in some detail a variety of functions of beliefs and related mental representations. For example, some beliefs might be intended to define a person relative to other members of a social group (Shavitt & Nelson, 1999) or to provide a sense of consensus and belonging (Sears & Levy, 2003). Beliefs can be utilized to gain closure (Kruglanski, 1980) and avoid uncertainty or ambiguity (Roney & Sorrentino, 1995). Maintaining a positive self-image and protecting the ego may be the primary purpose of some beliefs (Baumeister, 1997), whereas others may serve as valued possessions (Abelson, 1986).

Among the most important functions is the representational function (Kruglanski, 1980). Beliefs provide knowledge about something in the world to the extent possible given constraints, such as available time, effort, and information (Kruglanski, 1980). Philosophical accounts refer to beliefs as propositional attitudes we have regarding a particular state of affairs that we regard as true (see Baker, 1987). Building from a common sense understanding, psychological accounts encourage the idea that beliefs are a more or less true representations of a given state of affairs (Fishbein & Ajzen, 1975; Wyer & Albarracin, 2005). Attitudes, which are mental representations that are held with some conviction (Abelson, 1988; Kruglanski & Stroebe (2005), like beliefs, also fulfill representation/ knowledge functions. For example, Kruglanski and Stroebe (2005) state, “If, as, we presently assume, an attitude may fruitfully represent an evaluative judgment, then any attitude, independent of the evidence of which it was based and of the epistemic motivations (or envisioned functions) affecting its formation, may be said to fulfill a knowledge function” (pg. 339). Representational goals are likely to be salient in many contexts. For example, the Elaboration Likelihood Model (Petty & Cacioppo, 1986) and Heuristic and

Systematic Information Processing Model (Chaiken, Wood & Eagly, 1996) of persuasion propose that in persuasion contexts, people's main motivation is the desire to formulate valid and accurate mental representations (also see Kruglanski & Thompson, 1999).

Prior theorists have convincingly argued that people do not always attempt to achieve representational goals (i.e., to be accurate) when forming or changing beliefs or engaging in other types of cognitive activity (Epstein, 1990; Kunda, 1990; Kruglanski, 1980; Pyszczynski & Greenberg, 1987). For example, Epstein (1990) proposed that people perceive and form beliefs about reality through two different cognitive systems, one of which is an intuitive-experiential system that is guided by intuition, emotion and past-experience, and operates expediently and without extensive cognitive processing. According to Epstein (1990), people rely on the intuitive-experiential system for the majority of their every-day reasoning, and through this develop beliefs that may not accurately represent experience (i.e., achieve representational goals) or even be intended to do so given that this system operates outside of conscious awareness. In contrast, people devote substantial cognitive resources when engaging the analytical-rational system, and through this may be more likely to use logic to arrive at accurate conclusions.

Seminal to the framework we later describe, Kunda's (1990) theory of motivated reasoning states that people are motivated not only derive accurate conclusions, but also to derive particular conclusions, which she labels directional conclusions. Directional goals bias reasoning by influencing which information is attended to and utilized, which is achieved by influencing memory processes, the selection and application of existing beliefs, and the selection of inferential rules. Thus, people access and apply memories, beliefs and rules differently depending upon the directional goal (e.g., to feel less anxiety) to reach a desired conclusion, which may be or may become a belief. As stated by Kunda (1990), "...both kinds of goals affect reasoning by influencing the choice of beliefs and strategies applied to a given problem. But accuracy goals lead to the use of those beliefs and strategies that are considered most appropriate, whereas directional goals lead to the use of those that are considered most likely to yield the desired conclusion" (pg. 481). Kunda (1990) reviewed a large body of evidence demonstrating that directional goals influence reasoning and its outcomes (e.g., beliefs) as readily as do accuracy (i.e., representational) goals.

We posit that a particularly important directional goal is hedonic, and thus beliefs serve hedonic functions. In other words, beliefs help us to regulate affective states in valued directions and achieve our overarching hedonic goals, which include the up-regulation, down-regulation, and maintenance of pleasant and unpleasant emotions that vary by person and situation (Tamir, 2015). For example, the belief that we can communicate with the dead may protect us from the sadness and fear that typically accompanies the deaths of those we love. Previous theorists and researchers have argued along similar lines. For example, Wyer and Albarracín (2005) state as a function, "...to construct a representation of oneself and the world that permits one to cope effectively with life situations and, therefore, to lead a happy and successful life" (pg. 306). By helping people to gain closure or avoid uncertainty or ambiguity (Kruglanski, 1980) or maintain a positive self-image (Kelly, 1967) beliefs can function to increase and maintain pleasant and decrease and avoid unpleasant emotions.

At least four empirically-supported social psychological theories explicitly suggest that beliefs serve hedonic functions. Just-World Theory (Lerner, 1980), System Justification Theory (Jost & Hunyady, 2002), Compensatory Control Theory (Kay et al., 2010; Kay, Whitson, Gaucher & Galinsky, 2009) and Terror Management Theory (Pyszczynski, Greenberg, & Solomon, 1999) all provide evidence that people form and change beliefs to reduce or cope with unpleasant emotions. Theory and research on just-world beliefs suggest that people are motivated to alleviate depression and anxiety resulting from a chaotic and inexplicable world in which anyone has the potential to be victimized and suffer. They do this by forming and strengthening beliefs that the world is inherently just (e.g., Bonanno et al., 2002; Dalbert, 2002). System Justification Theory proposes that people form and strengthen beliefs that support and justify the status quo and its supporting systems (e.g., conservative political ideologies) to reduce unpleasant affect and maintain and establish order, certainty, and perceptions of a safe environment in the face of threat (Bonanno & Jost, 2006; Landau, et al., 2004; Wakslak, Jost, Tyler & Chen, 2007). Building upon Just World Theory and System Justification Theory, Compensatory Control Theory suggests that people form and change particular types of belief (e.g., religious beliefs or political ideologies) to reduce and prevent feelings of anxiety that accompany threats to personal control and resulting perceptions of randomness and chaos (Kay et al., 2009; 2010; Inzlicht, Tullett & Good, 2011). Terror Management Theory states that people protect themselves from anxiety-inducing thoughts of mortality or death by affirming their symbolic or literal immortality through the formation and expansion of beliefs that provide a sense of meaning to their lives (e.g., existence of God; Inzlicht et al., 2009; Norenzayan & Hansen, 2006; Vail, Arndt & Abdollahi, 2012). Additional theory and research from personality and social psychology demonstrate associations between one particular type of belief, supernatural beliefs (e.g., religious, paranormal/peculiar, fate-related) and affect suggestive of a hedonic function of supernatural beliefs (Boden, 2015; Inzlicht et al., 2009; Tang, Shepherd & Kay, 2015; Whitson, Galinsky & Kay, 2015). Together, this growing body of theory and research suggests that even some of the most important beliefs we hold may be related to our overarching hedonic goals, potentially more so than our attempts to accurately represent experiences more generally.

An Integrative Framework

Although – as noted above -- there are many functions of beliefs, we focus our discussion on the interplay of hedonic and representational functions, while noting that other functions might work in a similar manner. In most cases, multiple goals act together in influencing belief formation and change (Kunda, 1990; Kruglanski, 1980). These goals need not be conscious, and may often be pursued through non-conscious, or automatic, processes (e.g., Mauss, Cook, & Gross, 2007). A given belief may form and/or change in service of representational and hedonic functions in either a complementary or competing manner, often leading to trade-offs among functions, as explained below. The extent to which hedonic goals will shape belief formation and change will be constrained by various factors and will vary by context (also see Kunda, 1990).

Complementary and Competing Beliefs

Multiple beliefs and predecessors of beliefs (e.g., hypotheses, ideas) that may eventually be held with a level of conviction indicative of a belief compete to fulfill the representational or hedonic goals that are active. The belief that will be dominant and held with higher conviction is the one that best fulfills the active representational and hedonic goals in that context.

In Figure 1, we depict the manner in which beliefs serve representational and/or hedonic functions in a continuous Cartesian coordinate space, with the Y axis representing the extent to which a belief serves a representational function, and the X axis representing the extent to which a belief serves a hedonic function. Each axis ranges from “working for” to “working against,” as any belief can, to some extent, work to fulfill or work against fulfilling a given function. In terms of the representational function, “working for” is associated with belief accuracy, whereas “working against” is associated with belief inaccuracy. In terms of the hedonic function, “working for” is associated with successful regulation of emotions consistent with one's specific hedonic goals, whereas “working against” is associated with unsuccessful regulation of emotions resulting in a decrease in desired emotions (e.g., calmness while completing a driver's road test), or maintenance or increase in unwanted emotions (e.g., fear when conversing with a date).

In some cases, a belief will primarily serve a representational function (in coordinate space A, near the Y axis in Figure 1) or a hedonic function (in coordinate space A, near the X axis). An example of a belief that primarily serves a representational function would include “Pluto is a dwarf, not a standard planet,” labeled “1” in the figure. An example of a belief that primarily serves a hedonic function would include a belief related to communication with the dead formed following the death of a loved relative (e.g., “I can remain in contact with my loved one”), labeled “2” in the figure. Typically, however, both representational and hedonic goals are salient. In such cases, beliefs can serve representational and hedonic functions in a complementary fashion (in coordinate space A, equidistant from the X and Y axes in Figure 1) or in a competitive fashion (in coordinate space B or D, equidistant from the X and Y axes).

When both representational and hedonic goals are salient, beliefs can serve representational and hedonic functions in a complementary or competing manner. When beliefs fulfill representational and hedonic functions in a complementary manner, the belief will be accurate *and* successfully regulate emotions to some extent. For example (labeled “3” in the figure), a tennis player who loses a match may believe, “I lost because I did not train as rigorously as I should have,” which may be an accurate representation of the situation and may protect the individual from believing she lost due to other factors (e.g., lack of talent) that are less easily changed and therefore more hedonically unpleasant.

Explaining Trade-Offs Among Beliefs

When beliefs serve representational functions in a competitive fashion, beliefs may be (a) more accurate than successful at regulating emotions, or (b) more successful at regulating emotions than accurate. In these instances, beliefs represent a trade-off between

representational and hedonic functions. There are many examples of beliefs that serve representational functions at the expense of hedonic functions. For example (labeled “4” in the figure), many people proceed through emotionally painful developmental periods when they change their beliefs to reflect inherent limitations in what they can achieve (e.g., “I do not have the health necessary to become an astronaut”), or to reflect fallibility in themselves and valued others (e.g., believing that one’s parents manifest negative qualities). There are also many examples of beliefs that serve hedonic functions at the expense of representational functions. For example (labeled “5” in the figure), research has found that people are overly optimistic in a variety of domains, ranging from their abilities to achieve important goals (e.g., lasting marriage, exam scores) to the likelihood they will develop health problems (e.g., smokers believing they will not develop smoking-related diseases) to the profitability of the companies they work for or invest in (Armor & Taylor, 2002).

When multiple hedonic goals are salient and in competition, a belief that serves one hedonic goal at the expense of another may be dominant (e.g., the belief “Hell exists” provides a current sense of control through the following of a rule-based moral system while increasing fear of what’s to come). A related trade-off occurs when a belief fulfills a short-term hedonic goal, but leads to greater unpleasant or unregulated emotions in the long-term. For example, childhood adversity and traumatic events can result in negative beliefs about oneself (e.g., “I am a bad person) and the self as the cause of victimization (e.g., “I deserved what happened to me”; Garber, Keiley, & Martin, 2002). These beliefs may be rigidly held because they successfully serve a hedonic function in the short-term by providing a sense of prediction and/or control in a chaotic and inexplicable world. However, continually and broadly applied across one’s life, these beliefs may give rise to consistent and stable patterns of thought, emotion, and action that make these people more vulnerable to depression (Garber et al., 2002).

Trade-offs may also occur regarding the representational functions. Because people continually use satisficing strategies to develop explanations for their experiences (Simon, 1956), they may develop inaccurate beliefs that are functional in the short-term, but dysfunctional in the long-term. For example, the belief, “I am attracted to people who are emotionally unstable” might be accepted as a belief to explain recurring strife in one’s relationships and might lead to less negative affect after a failed relationship. However, because this belief does not explain the true cause of the strife (e.g., the individual holding the belief is causing the strife in the relationships), it may in the long run prevent the holder of the belief from correcting maladaptive behaviors that contribute to future interpersonal dysfunction.

Beliefs that serve neither representational nor hedonic functions (represented in the figure in coordinate spaces E and C) may have been formed in the service of representational and/or hedonic functions that they no longer successfully fulfill. In a sense, these are vestigial beliefs, which have not been discarded in favor of new beliefs that might better achieve representational or hedonic goals. Every person likely holds beliefs of this kind, which were often formed in childhood to make sense of experience or regulate emotions with limited means. A special case of vestigial beliefs are those that *work against* both representational and hedonic functions (in coordinate space C, equidistant from the X and Y axes, and

labeled “6” in Figure 1). For example, negative self-efficacy beliefs (e.g., “I can't accomplish anything no matter how hard I try”) formed in childhood to serve representational (e.g., to explain continued failure) and/or hedonic functions (e.g., to protect against future failure by curtailing goal-directed behavior), may sometimes be vestigial in the sense that they no longer serve the functions they were originally intended to serve. As explained in the section that follows, such beliefs may be reinforced by being consistent with other beliefs, and thus mitigate dissonance.

Context and Constraint

Common among theories and research suggesting hedonic functions of beliefs is the link between beliefs and threats to one's life, personal control, or sense of order and predictability, along with chaos, uncertainty, and randomness. For example, just-world beliefs result from response to a chaotic and inexplicable world (Bonanno et al., 2002), beliefs regarding the status quo maintain and establish order and certainty in the face of threat (Wakslak et al., 2007), and beliefs that provide a sense of meaning reduce anxiety associated with thoughts of death (Vail et al., 2012). Together, the reviewed theories suggest that beliefs are likely to form and change in service of hedonic functions in contexts that are ambiguous, uncertain or difficult to understand (henceforth labeled together as “ambiguous”). For example, Tang and colleagues (2014) found that beliefs in fate increased when participants were presented with a difficult decision: deciding between Barak Obama and Mitt Romney in the 2012 US presidential election.

The reviewed theories further suggest that beliefs are likely to form and change in service of hedonic functions in contexts that have immediate or long-term implications in terms of one's needs, goals, and concerns via their elicitation of emotions. Wilson & Gilbert's (2008) AREA model of affective adaptation joins ambiguity and emotion to suggest that people are motivated to explain self-relevant unexplained events, in part because they have emotional reactions to them. Suggesting a hedonic function, people adapt to self-relevant unexplained events and have weakened emotional responses when they re-occur by explaining them (e.g., identifying causes and consequences). A lack of knowledge about the source of a given emotion episode is inherently unpleasant (e.g., Zimbardo, LaBerge, & Butler, 1993), and intensifies emotional reactions (both pleasant and unpleasant; Bar-Anon, Wilson & Gilbert, 2009). The explanations used to regulate emotions can be immediately held with a level of conviction indicative of belief (Gilbert, 1991), or become belief through ongoing successful regulation of emotions and related increases in conviction (see below). Furthermore, cognitive consistency theories suggest that change of belief can serve a hedonic function in any context in which discrepancies between conflicting cognitions and/or between cognitions and behaviors (i.e., dissonance) result in unpleasant affect (e.g., Festinger, 1957). People are motivated to reduce such discrepancies by changing their future behavior and/or their cognitions, such as belief. By doing so, unpleasant affect is reduced (Cooper, Zanna, & Taves, 1978; Jonas, Graupmann, & Frey, 2006).

Ambiguous contexts will be especially important in terms of contributing to emotions (Zimbardo et al., 1993) and motivating the formation and change of beliefs to regulate emotions (Wilson & Gilbert, 2008). Thus, Whitson and colleagues (2015) found that

experimentally induced emotions reflecting uncertainty (e.g., worry, surprise) increased beliefs in the paranormal (along with conspiratorial and system justification-related beliefs). Achievement of hedonic goals (e.g., reduction in anxiety) through formation or change of belief will be an especially potent form of evidence for the validity of the belief, and lead to increased or reinforced conviction. This hypothesis is consistent with persuasion models, which describe the influence of affect on belief change (Chaiken et al., 1996; Kruglanski, 1980; Kruglanski & Thompson, 1999; Petty & Cacioppo, 1986). This hypothesis is also consistent with affect-as-information theory (Clore, 1992) and affective forecasting theories (Wilson & Gilbert, 2005). These theories and findings (e.g., Gasper & Clore, 1998) demonstrate how emotions serve as immediate, tangible, unmediated measure of the validity of beliefs (also see Westen, Blagov, Harenski, Kilts & Hamman, 2006).

As pointed out by Kunda (1990) and others (Kruglanski, 1980), people are not entirely free to form and change belief according to their desires, simply because a new belief might help them to feel a certain way. Multiple factors will constrain reasoning and limit the formation and change of belief in the service of hedonic goals, including cognitive and motivational resources, accessibility, self-relevance, and difficulty of comprehending information, coherence with prior beliefs and representational goals (Chaiken et al., 1996; Kruglanski, 1980; Kruglanski & Thompson, 1999; Petty & Cacioppo, 1986; Simon, 1956). However, a large body of empirical evidence suggests that people may intend to fulfill hedonic goals as readily as representational goals (Kruglanski, Pierro, Mannetti, Erb & Chun, 2007; Kruglanski & Thompson, 1999), and hedonic goals can exert influence in contexts characterized by either high or low levels of information processing (Chaiken et al., 1996; Petty & Cacioppo, 1986). People may even attempt to maximize fulfillment of the hedonic function for any belief they hold, regardless of the extent to which the belief is also intended to represent experience or serve other goals (Barrett, Ochsner & Gross, 2007; Boden & Berenbaum, 2010; Clore, 1992; Clore & Gasper, 2000; Westen & Blagov, 2007). This will be especially true in contexts that are ambiguous, and thus allow for a wide range of belief content that does not work against a representational function. For example, an individual may form a belief about the existence of the afterlife that reduces anxiety associated with thoughts of mortality. This individual may be able to do so, despite thinking of him/herself as a rationalist empiricist, because of ambiguity regarding whether consciousness continues to exist after the death of one's body.

Not only in ambiguous contexts, but in almost any context, people can hold beliefs that are not intended to be accurate and still maintain a sense of themselves as rational and logical (Kruglanski & Webster, 1996; Kunda, 1990; Pyszczynski & Greenberg, 1987). In regard to accuracy (i.e., representational) and directional (e.g., hedonic) goals, Kunda (1990) notes: “both kinds of goals affect reasoning by influencing the choice of beliefs and strategies applied to a given problem. But accuracy goals lead to the use of those beliefs and strategies that are considered most appropriate, whereas directional goals lead to the use of those that are considered most likely to yield the desired conclusion” (pg. 481). Thus, people attempt to be logical and rational when achieving directional goals, such as forming and changing beliefs intended to fulfill hedonic functions. Only when they have adequate and convincing evidence do people form and maintain such beliefs. Kunda (1990) reviews research that suggests that such evidence is gained through various processes, such as creatively

combining knowledge to support desired beliefs, accessing only a subset of knowledge, and utilizing search and memory strategies to find confirmatory but not disconfirmatory evidence. Emotions are an additional and potent form of evidence for the validity of beliefs intended to fulfill hedonic functions (Clore, 1992; Gasper & Clore, 1998; Wilson & Gilbert, 2005). People thus rely on their emotions to support directional goals that are hedonic in nature. Because accuracy and directional goals are generally achieved through the same set of processes, and the beliefs formed in regard to either of these goals are convincing and defensible, people can believe they are maintaining objectivity when in fact their reasoning is biased. Thus, it is no surprise that people can hold at the same time beliefs that serve hedonic and representational functions.

It bears emphasizing, however, that people often do not strive to be accurate, despite the salience and pervasiveness of representational goals. Research has demonstrated that people are motivated to be accurate under some conditions, but not others, and these accuracy goals can vary by person and situation (e.g., Harkness, DeBono, & Borgida, 1985). Inaccurate and falsified beliefs persist even when people have the resources required for accuracy (see Lewandowsky, Ecker, Selfert, Schwarz & Cook, 2012). People readily implement strategies (e.g., suppression, distraction) to deliberately persuade themselves to adopt new attitudes with little regard for the accuracy of these new attitudes (Maio & Thomas, 2007). People do not generally attempt to find an optimal solution when reasoning (Gigerenzer & Selten, 2002; also see Epstein, 1990). They instead use mental short-cuts and heuristics (Tversky & Kahneman, 1974) and reason until reaching a particular acceptability threshold, which is labeled “satisficing” (Chaiken, 1980; Simon, 1956). Furthermore, research suggests that some people rely on an intuitive-experiential system driven by emotion for their every-day reasoning more so than an analytical-rational system driven by logic (Epstein, Pacini, Denes-Raj, & Heier, 1996). Taken together, theory and research suggests that people often do not intend to be accurate, and when they do, their reasoning may be limited and contribute to inaccurate beliefs that are held without contention. Thus, people may hold beliefs that fulfill hedonic functions not only because they are motivated to do so, but because they do not have the ability to satisfy the representational functions of beliefs.

Implications and Future Directions

We have proposed an overarching framework that affords a central role to the hedonic functions fulfilled by beliefs. Our framework integrates empirically supported models of motivated cognition (e.g., Kunda, 1990), persuasion (e.g., Chaiken et al., 1996), reasoning (e.g., Epstein, 1990), and emotion (Clore, 1992; Wilson & Gilbert, 2008) to broadly capture what is known about why people believe what they do. Our framework builds upon each individual model to offer productive empirical next steps. In this section, we describe (1) individual differences in belief, (2) belief change, and (3) the ways in which beliefs contribute to adaptive versus maladaptive psychological functioning.

Individual Differences

From an individual differences viewpoint, our framework provides a perspective on how people come to differ in the beliefs they hold, and the consequences these differences have.

Within and between-person variation in belief content is enormous. This isn't surprising, as people are exposed to an extraordinarily wide-ranging set of experiences throughout their lives, all of which may contribute to distinct beliefs. Yet, our framework suggests it is not just exposure to different experiences that contribute to different beliefs. More interestingly, it is experience filtered through different hedonic, representational and other goals that can also give rise to different beliefs. Thus, our framework provides an understanding of belief diversity, and the far-reaching consequences of this diversity. By identifying goals that influence all beliefs, our framework also finds unity in the processes that contribute to all beliefs, including those with vastly different content.

Individual differences in the combinations of goals that give rise to different beliefs help to explain how similar experiences can contribute to different beliefs. If diversity in belief content were solely attributable to variation in the experiences that give rise to beliefs (e.g., reading literature, crashing one's car, attending a math seminar, contemplating, deducing from, extrapolating from, and associating information one has already acquired), then all individuals with similar experience would have similar or identical beliefs. Although people with similar experiences do sometimes share beliefs with similar content, the enormous within and between-person variation in belief content make clear that experience is not the sole contributor to diversity in belief.

Instead, we posit that experience is *filtered* by hedonic, representational and other goals to give rise to a diversity of beliefs with varying content. For example, following the experience of trauma or interpersonal loss, there are likely to be differences in the combination of hedonic and representational goals that lead to increases in negative beliefs about oneself as the cause of his/her misfortune (e.g., "I deserved what happened to me because I am a bad person"; Garber et al., 2002; Grych et al., 2000) versus those that lead to increases in coping-related beliefs (e.g., "I have the ability to positively influence my life and surroundings"; Florian, Mikulincer, & Taubman, 1995). Both types of beliefs may serve similar hedonic functions: decreasing unpleasant emotion by providing a sense of control. However, the hedonic goals that contributed to the formation of these beliefs may differ. The former belief may be intended to decrease fear by making the world more comprehensible, whereas the latter belief may be intended to increase hope regarding the future. Both beliefs may serve the representational function of accurately representing experience (in this case, representing the self in relation to the trauma or loss), but they may also vary in terms of the representational goals that contributed to their formation. The former belief may be intended to accurately represent past and current personal experiences of the self's worthiness, in relation to the event whereas the latter belief may be intended to accurately represent how the world works in terms of personal agency. Additionally, the hedonic and representational goals that give rise to these beliefs may be weighted differently. For example, two friends who are robbed while walking home late one night may have the identical hedonic goal of decreasing fear by providing a sense of control, and representational goal of accurately representing experience to prevent similar future occurrences. However, they may develop vastly different beliefs (e.g., "I was robbed because I was distracted by my friend" versus "I should walk home earlier to prevent robberies") because they weigh their hedonic and representational goals differently.

While the hypothesis that multiple goals act together in influencing belief formation and change is not in and of itself novel (e.g., Kunda 1990; Kruglanski, 1980), the mapping of goals/functions served by beliefs in a multidimensional continuous Cartesian coordinate space is. Each quadrant in our coordinate space meaningfully represents different combinations of working for and working against a pair of goals and functions. As an empirical heuristic, the use of a Cartesian coordinate space may be used to investigate the structure of multiple salient goals that give rise to beliefs and dimensions that underlie this structure. Similar work has been done, for example, with the structure of core affect as derived from multiple self-report scales (Yik, Russell & Steiger, 2011, also see Russell, 2003). There is no reason to believe that the coordinate space is limited to two-dimensions, and each salient goal/function might add another dimension that interacts with those represented. Thus, the interaction of numerous goals/functions underlying some of our most cherished beliefs may be simplified and empirically verified in reference to a Cartesian coordinate space, such as that we have proposed. We might further map where beliefs of a specific type (e.g., religious, identity) exist in the coordinate space for a given group of people, or where the most important beliefs for a given person fall. Building upon this framework, we can develop typologies of goals, beliefs and people that may be incrementally useful in understanding why people believe what they do, and in providing insight into personality, coping, and adaptive and maladaptive functioning.

Existing models tend to focus on identifying when representational (i.e., accuracy) goals are salient, when directional goals are salient, and describing the mechanisms by which each set of goals, in isolation, impact reasoning (Kunda, 1990). Alternatively, our framework focuses on how goals interact in various ways. To understand why people believe what they do, for any given belief, we must identify all salient goals, their importance in context, and the extent to which achievement of one goal hinders or helps fulfillment of all other goals. We can then develop specific hypotheses for any pair (or more) of goals (e.g. representational and hedonic) by using existing literature to identify contexts in which particular goals are salient, constraints on fulfillment of those goals, and mechanisms by which they are fulfilled. For example, in terms of coordination among representational and hedonic goals, we hypothesize that beliefs that are intended to be accurate and serve hedonic functions are more likely to be formed or changed in contexts that are unambiguous but that have implications in terms of one's needs, goals and concerns. In the context of being fired from one's job due to consistently browsing the internet, one might develop the beliefs, "Hard work pays" and "I didn't work hard enough." As ambiguity increases, competition among goals/functions will increase, leading to a trade-off such that beliefs will be more likely to work for a hedonic function and less likely to work for, and perhaps will work against, a representational function (e.g., "My boss is an idiot").

Our framework also distinguishes itself in terms of its hedonic focus. Hedonic goals appear to be especially salient and pervasive influences on belief formation and change and individual differences in belief. Different combinations of hedonic, representational and other goals will give rise to different beliefs. The salience and pervasiveness of hedonic goals may be reflected in the predominance of specific types of belief held by people with a diverse range of experience (e.g., religious/spiritual beliefs). Our framework suggests that people come to share similar beliefs because of similarities in overarching hedonic goals that

complement or compete with representational and other goals. For example, a substantial portion of the United State population believes in phenomena such as ghosts, astrology, and reincarnation (Moore, 2005), possibly because these beliefs consistently and successfully serve a hedonic function across a broad range of contexts (Boden & Berenbaum, 2004). However, belief with similar content can also serve very different functions. For example, belief regarding one's positive attributes (e.g., "I am a kind and compassionate person") may primarily serve a representational function in some people and a hedonic function in others.

Prior research has demonstrated the importance of emotions for belief formation and change. We extend such work by positing that goals related to emotion regulation in all its forms (e.g., increases, maintenance, or decreases in pleasant or unpleasant emotions of various types) are central to the formation and change of many of our most important beliefs, especially in particular contexts (e.g., ambiguous). Belief conviction itself may be associated with emotion regulation in a dose-response relationship. For example, the greater the conviction that a belief or proto-belief (e.g., hypothesis, attribution) reduces unpleasant emotions in a particular context, the greater the conviction with which it is held. Like prior theorists (Wyer & Albarracin, 2005), we hypothesize that the hedonic function may actually underlie several other functions served by belief, such as providing a sense of consensus (Sears & Levy, 2003), avoiding uncertainty (Roney & Sorrentino, 1995), and protecting the ego (Baumeister, 1997). With its hedonic focus, our framework may help guide research examining additional factors related to emotional experience that influence belief formation and change via hedonic goals/functions, such (a) as the extent to which people generally experience pleasant or unpleasant emotions (i.e., trait positive and negative affect; Boden, Berenbaum & Topper, 2012), (b) tend to have high versus low intensity or stable versus variable emotional experiences, (e.g., Dizen & Berenbaum, 2011), (c) use emotion regulation strategies centered on cognitive change, such as belief change (see Boden & Gross, 2013), and (d) understand and attend to their emotional experience (i.e., emotional awareness; Boden & Berenbaum, 2004; Boden, Gala & Berenbaum, 2013).

It is important to consider the *consequences* of individual differences in belief, and how they are influenced by hedonic goals. Consider, for example, individual differences in whether people endorse entity or incremental self-theories (beliefs about the malleability of self-attributes) in domains such as intelligence and morality (Dweck, 1999). Entity theories emphasize the fixed nature of human attributes, whereas incremental theories emphasize the malleable nature of these constructs. Both types of self-theories potentially serve representational functions by providing reasonable (albeit, potentially inaccurate) explanations and guides for why people do or do not change in various domains. In doing so, both types of self-theories provide an overarching understanding of a fundamental aspect of human existence: change versus stability of human characteristics, abilities, and traits. Yet, the representational functions served by self-theories may be tempered by the hedonic function they serve: to help regulate unpleasant emotions that are associated with the experience of difficulty or failure in attempts to learn or change. Furthermore, this hedonic function has important implications for action and further goal pursuit. Entity theories may serve hedonic functions by promoting disengagement from further attempts to change (e.g., "Why attend therapy when I will always be depressed?") and incremental theories may serve hedonic functions by promoting engagement in further attempts to change (e.g., "I will

become happier as I strive to improve myself"). By providing an understanding of why people hold entity versus incremental theories, the hedonic function can be leveraged to explain individual differences in the many outcomes associated with implicit theories, including learning and achievement (Good, Rattan & Dweck, 2012), personal control and willpower (Job, Dweck, & Walton, 2010), willingness to compromise for peace among people engaged in intractable conflict (Halperin, Russell, Trzesniewski, Gross & Dweck, 2011), and motivation to confront prejudice when it occurs (Rattan & Dweck, 2010).

Belief Change

It is often thought that beliefs will change when more accurate information is obtained. However, the large literature on confirmation bias (Nickerson, 1998) clearly demonstrates that people do not typically change their beliefs to improve accuracy after they have formed, except under circumscribed conditions such as those investigated by cognitive consistency theorists (e.g., Jonas et al., 2006). Specifically, people don't generally search for information that would challenge their beliefs and instead, people search for evidence that confirms their beliefs, and discard disconfirmatory evidence or reinterpret such evidence to support their beliefs. For example, a medical student who is comforted by her belief in the existence of an immortal soul that is separable from our mortal bodies may find that belief in conflict with a naturalistic materialism supported by medical school. She may either ignore the contradictory nature of the evidence, or reinterpret the evidence in a way that allows her to maintain her original belief (e.g., "I heal only bodies, for the soul needs no doctor"). Based on our framework, we posit that corrective information would primarily serve to modify beliefs that are intended to serve representational functions (coordinate spaces A and D in Figure 1). Because many beliefs are intended to also or primarily serve hedonic functions (coordinate spaces A and B in Figure 1), encountering corrective information will often not lead to belief change (Westen et al., 2006).

Consistent with a large literature on matching effects in persuasions (Petty, Wheeler & Bizer, 2000), we posit that a functional analysis of belief can provide insights into when and why people change through active intervention. For example, Walton and Cohen (2011) implemented a subtle intervention with African-American college students designed to enhance their perceptions of belonging by increasing the belief that feelings of non-belonging were widespread among freshman and were temporary. By changing beliefs in this manner, the intervention significantly improved the grade-point average, health, and well-being of students who were members of a traditionally negatively stereotyped group. One of the reasons the intervention may have worked so well is that it may have targeted beliefs that did not optimally serve either representational or hedonic functions in African-American students. Even a modest intervention may lead to substantial changes in beliefs that do not fulfill either representational or hedonic functions as well as the new belief does (coordinate spaces C and E in Figure 1). Psychological growth and related positive outcomes would result from changing one's beliefs or developing new beliefs that better serve hedonic and representational functions.

Compared to prior models, our framework provides a basis for a more nuanced and comprehensive functional analysis of beliefs due to: (a) its use of a multidimensional space

in which multiple goals/functions motivate belief formation and change; and (b) its focus on coordination, competition, and trade-offs among these goals/functions. Using our framework to functionally analyze beliefs, belief interventions that are tailored to address the functions served by the belief should lead to greater effectiveness. For example, health psychologists have explored the use of targeted interventions to change beliefs that directly influence behaviors that impact physical health, such as alcohol consumption, exercising, and condom use (e.g., Fishbein & Yzer, 2003). Example of such targeted beliefs might include, “My health will not be negatively impacted by drinking four to five glasses of beer everyday”, “I do not have time to exercise”, and “Using condoms suggests that I do not trust my partner”. The mixed results of these interventions (for a discussion see Fishbein & Yzer, 2003) may in part be due to the fact that many of these beliefs, and the behaviors that they support, serve hedonic functions. Addressing representational goals, such as through argumentation or the presentation of new, relevant facts may have been unsuccessful at changing these health-related beliefs when they are successfully serving hedonic functions (coordinate spaces A and B in Figure 1). Instead, it might be more useful to develop interventions that provide new beliefs or behaviors that fulfill the hedonic function served by the original belief, thereby decreasing the need to hold that particular belief (e.g., identifying and enacting stress reduction activities to replace alcohol consumption for this purpose; increasing tolerability of exercising by identifying time-limited and pleasurable exercises). However, when beliefs are intended to serve a representational function, albeit unsuccessfully (i.e., beliefs are inaccurate), interventions that are designed to challenge the validity of the belief, such as those designed to challenge positive expectations regarding the effects of using alcohol and drugs (Darkes & Goldman, 1993), may prove useful in changing beliefs.

Functionally oriented research is needed to investigate all factors that contribute to belief change, along with belief formation and stability, including (a) the functions originally served by a particular belief, (b) the goals that influenced the initial development of the belief, (c) the contexts in which these goals were salient, (d) how well the belief currently serves various functions, and (e) how the belief continues to influence a person's life even though it is not accurate or does not help to regulate emotions in valued direction. Such insight may also be useful in motivating efforts to change maladaptive belief, such as beliefs related to a lack of social belongingness (Walton & Cohen, 2007), limitations in personal control and willpower (Job et al., 2010), the fixed nature of intelligence and personality (Dweck, 1999; Halperin et al., 2011), and even relatively normative but nonetheless destructive and unhelpful stereotypes (Hill & Augoustinos, 2001).

Maladaptive and Adaptive Psychological Functioning

Beliefs play a key role in determining maladaptive and adaptive psychological functioning. Based on our framework we derive the unique hypothesis that beliefs will increase well-being and mental health if they successfully serve their intended functions, while being (flexibly) coordinated in function and content; in contrast, beliefs will decrease mental health and well-being if they do/are not. Part of mental health is coordinating one's beliefs to increase the chances that intended functions are served and important beliefs are not in conflict with each other or with context-dependent goals. Belief(s) are more highly coordinated in this manner when: (a) they successfully fulfill one or more functions without

impeding fulfillment of other functions through other beliefs: and (b) the function(s) they serve facilitate achievement of salient goals in specified contexts. For example, the belief, “Worrying about future negative events keeps them from occurring” may be more highly coordinated in this manner when one lives in a dangerous neighborhood, in which a salient goal is to avoid being victimized. This belief may be less coordinated in the context of a vacation in a tropical resort, in which a salient goal is to relax. As context changes, so do the functions that belief fulfill and the goals that are salient. Therefore belief and belief activation must be flexible, but not so flexible as to fluctuate widely with little regard to fulfillment of any function, thus potentially contributing to further distress (e.g., Dizen & Berenbaum, 2011).

Because beliefs can serve hedonic functions, people with exceptional well-being and mental health sometimes hold inaccurate beliefs (e.g., “I have a positive influence on the world around me”; Mezulis, Abramson, Hyde, & Hankin, 2004), contradictory beliefs (e.g., “I am a good person”; “I am sometimes too busy to be a good friend”), and paranormal/peculiar beliefs (e.g., belief in the existence of aliens; Boden, 2015). To the extent that such beliefs are intended to and successfully serve hedonic functions and are flexibly coordinated, they may be adaptive regardless of their accuracy. Inaccuracy is maladaptive primarily for beliefs intended to serve a representational function, although there will be occasions when belief intended to serve hedonic functions will be maladaptive due to inaccuracy (e.g., the belief, “My boss is a jerk”, formed to decrease unpleasant affect following by a fired employee, is inaccurate and may contribute to the employee's lack of success in future jobs).

Accurate beliefs may be maladaptive if they do not successfully serve their intended function and/or are not flexibly coordinated in function and content. For example, the belief, “I am below average in my talents and skills” may be accurate but conflict with salient goals in specific contexts (e.g., to most favorably present oneself on a job interview) or more broadly (e.g., to perceive oneself as a valuable member of society). Because this belief is not coordinated with respect to one's goals, it may contribute to distress and further maladaptive outcomes (e.g., a rejected job application). Alternatively, this belief may be flexibly coordinated with the values and goals of members of a socio-cultural milieu that espouses hard work as a path to success more so than talent and skill, and hence, promote adaptation among such members. Entity theories related to personality (e.g., “My personality is fixed”) are examples of meta-belief that may in some cases and in some contexts be accurate, but at the same time may be maladaptive (e.g., Erdley, Loomis, Cain & Dumas-Hines, 1997) because they are not flexibly coordinated with respect to the goal of growing and changing to better adapt to life's circumstances.

Understanding the functions served by beliefs provides insights into functioning. For example, research has shown that in western cultures beliefs expressing optimism (e.g., positive events are more likely to occur in the future than negative events) tend to be associated with positive outcomes (e.g., Scheier & Carver, 1993), whereas beliefs expressing pessimism tend to be associated with negative outcomes (e.g., Cantor & Norem, 1989). However, we hypothesize that both optimistic and pessimistic beliefs can successfully serve hedonic functions. Optimistic beliefs may serve hedonic functions by helping people to cope with stressful life events (Scheier & Carver, 1985). Pessimistic beliefs may serve hedonic

functions by protecting people from disappointment and threats to self-esteem (Norem & Cantor, 1986). Understanding when and for whom optimistic versus pessimistic beliefs serve hedonic functions can provide further insight into the numerous cognitive, emotional, and behavioral outcomes found to be associated with these beliefs (e.g., Cantor & Norem, 1989; Scheier & Carver, 1993). Such insights might be useful for psychological scientists attempting to understand links between functioning and broad personality traits (see Dweck, 2008). This might be done by showing how personality traits may be characterized in part by specific beliefs (e.g., optimistic beliefs are positively associated with extraversion; Marshall, Wortman, Kusulas, Hervig, & Vickers, 1992).

Moving to dysfunction of greater severity, almost every type of mental disorder includes as a sign or symptom, specific types of belief. For example, delusions are a symptom of schizophrenia (American Psychiatric Association, 2000), inaccurate and rigidly held beliefs, often called “core” beliefs or schemas, contribute to mood and anxiety disorders (Riso et al., 2007), and beliefs about the expected consequences of using a alcohol or drugs (i.e., “expectancies”) are associated with substance use disorders (Jones, Corbin, & Fromme, 2001). Based on our functionalist framework, beliefs are characteristic of mental disorder not necessarily because they are inaccurate, but because they are inflexibly coordinated in content and/or function. To illustrate, individuals with excessive social anxiety hold beliefs regarding themselves (as socially incompetent) and others (as critical judges) that transform innocuous social cues (e.g., a person looking away during a conversation) into social threats (e.g., Rapee & Heimberg, 1997). These beliefs are typically held with high conviction, which may result from their successful service of a hedonic function (e.g., protecting oneself from unpleasant emotions associated with social rejection). Yet these beliefs may also be maladaptive. This is because these beliefs serve: (a) one hedonic function at the expense of another hedonic function (e.g., having pleasurable social interactions); and (b) a hedonic function at the expense of a representational function (i.e., when there exists limited supporting evidence) when representational accuracy is needed to successfully build and navigate interpersonal relationships. Such beliefs contribute to behavior that hinders interpersonal relationships (e.g., reduced interpersonal interactions results in few friends), and creates more pervasive and intense long-term hedonic problems (e.g., social anxiety disorder).

Understanding when and why beliefs change from a functionalist perspective may prove to be especially important for treating dysfunctional beliefs through targeted interventions. For example, cognitive therapy, which is used to treat mental disorders ranging from major depression to schizophrenia (Butler, Chapman, Forman & Beck, 2006), focuses on changing maladaptive cognition (e.g., thoughts, beliefs) to decrease symptoms of mental disorders. Studies have shown that reductions in maladaptive beliefs are causally associated with reductions in symptoms of mood and anxiety disorders (e.g., Boden et al., 2012). Further increases in the success of cognitive therapies and other treatments targeting beliefs may result from an increased focus on identifying and directly addressing the extent to which these beliefs were intended to serve hedonic and/or representational functions and how well they do so. Especially important among potential strategies, and unique additions to established cognitive therapies, are those intended to increase an understanding of the hedonic functions of a targeted belief.

Efforts tailored to address the hedonic function may be especially influential in contexts in which the hedonic function is most likely to be salient: those that are ambiguous and emotionally arousing. In addition to increasing awareness of the hedonic functions served by a particular belief, the treatment provider can help a belief holder to identify any tension between functions served or hindered by the belief, such as when representational functions are hindered by achievement of hedonic functions. The treatment provider can also help to make explicit and prioritize short-term or long-term hedonic goals served by the belief, and if necessary, to find means (through belief or otherwise) to achieve prioritized hedonic goals (short-term or long-term) or to create a balance between short-term/long-term hedonic goals. Two psychosocial interventions, motivational interviewing (Miller & Rollnick, 2013) and behavioral activation (Jacobson, Martell & Dimidjian, 2001; also see Lewinsohn, 1975) include similar procedures.

Because beliefs are characteristic of many mental disorders, an additional target for future work is examining how our framework can be applied to improve the mental health and functioning of individuals receiving treatment for a range of different types of psychopathology. One might design, test, and modify interventions to increase awareness of the functions served by a given belief. Through this beliefs intended to fulfill representational functions can be challenged to improve accuracy. Other means can be found to fulfill hedonic functions for belief that are primarily intended to serve hedonic functions. Further gains might accrue by focusing on treatment-related beliefs, which moderate and/or mediate treatment success. For example, hedonic and representational goals may compete in regard to treatment-seeking beliefs, beliefs regarding one's own ability to change, self-efficacy related beliefs regarding whether a patient can successfully complete treatment given side-effects and involvement. Especially interesting will be functional examination of expectations regarding the effects of treatment. Phenomena such as the placebo and nocebo effect may be a direct reflection of the success at which treatment-related expectations fulfill a hedonic function (Petrovic, Dietrich, Fransson, Andersson & Carlsson, 2005).

Concluding Comment

Beliefs make the world more predictable, and increase our ability to survive and reproduce (Barlow, 2001). They also form a core aspect of our identity (Heine et al., 2006; James, 1902/2002), and define and shape our relationships with other people (Jost, 2006). Furthermore, beliefs influence many of the key processes studied by psychological scientists, including cognitive (Dube et al., 2010; Risen & Gilovich, 2008; Wyer & Hartwick, 1984), emotional (Boden & Berenbaum, 2010), and behavioral processes (Dweck & Leggett, 1988; Fishbein & Ajzen, 1975). It is thus not surprising that beliefs are important to those who hold them (Abelson, 1986; Heine et al., 2006; Wyer & Albarracin, 2005). What may be surprising, however, is that we still have so much to learn about *why* people believe what they do.

We have proposed an overarching framework that highlights the hedonic as well as the representational functions of our beliefs. A joint consideration of these two sets of functions is helpful in understanding why people believe what they do, especially when beliefs appear to be inconsistent with available evidence. A practical implication with broad applicability

(e.g., for interventions to change maladaptive beliefs) is that a functional analysis will be useful to understand and change beliefs. Without this, efforts such as presenting corrective information may be unsuccessful and even counterproductive. We believe that functionally-oriented interventions hold great potential for improving the quality of life of those who hold maladaptive beliefs, in addition to increasing our understanding of why we believe what we do.

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Figure 1.

A depiction of a functionalist approach to belief which shows that any belief can fulfill (a) only representational (coordinate space A, near the Y axis) or hedonic functions (coordinate space A, near the X axis), (b) both representational or hedonic functions in complementary (coordinate space A, equidistant from the X and Y axes) or competing ways (coordinate spaces B & D, equidistant from the X and Y axes), or (c) neither representation or hedonic functions (coordinate spaces C and E). Examples labeled with numbers are discussed in the text.