Research Statement

What does it mean for an architect to want to move to a different firm, a reluctant dieter to crave an apple turnover, or a fourth-grader to love math? Understanding how these experiences develop and influence behavior is critical to explaining human motivation, decision making, and attitudes. Integrating advances in the psychology of motivation and cognition, my research examines how people come to focus on and make sense of the motivationally significant events, opportunities, and other phenomena they encounter. The passages below trace broad themes emerging from this work.

**ABSTRACT AND CONCRETE MINDSETS**

Of the many cues present in any situation, which will captivate one’s interest? Addressing this question is among behavioral science’s basic challenges, in that, as advertisers, political operatives, and other aspiring opinion-makers recognize, human action grows directly from what people attend to and how they interpret it.

My collaborators and I are exploring the role of self-regulatory mindsets in determining how people interpret everyday events, opportunities, and situations (Freitas, Gollwitzer, & Trope, 2004). Building on related work (Freitas, Salovey, & Liberman, 2001), we have suggested that thinking about the abstract aims (versus underlying action procedures) of an activity will increase the accessibility of the general cognitive operation of considering activities’ abstract purposes (versus underlying processes), thus coloring how one construes newly encountered information. Balancing concerns about long-term, abstract aims with concerns about the immediate, concrete actions one must carry out in order to reach those aims constitutes a core essence of self-regulation. Accordingly, this hypothesized impact of an abstract or concrete mindset across different content domains may influence a broad range of thought and behavior.

** Construing Others’ Goals **

In one series of studies testing these ideas, subjects assigned to an “abstract mindset” manipulation thought about their own abstract, long-term goals, whereas subjects assigned to a “concrete mindset” manipulation thought about concrete, specific procedures by which they might meet their goals. Next, in an “unrelated” experiment, they indicated what kinds of goals they thought others should pursue. As shown in Figure 1, participants in an abstract mindset were more likely to suggest that others pursue important, long-term goals, even in the face of immediate difficulties. Participants in a concrete mindset, in contrast, were relatively more sensitive to the difficulty of the underlying tasks others needed to carry out.

![Figure 1](image-url)  
*Figure 1.* After participants first had thought about their own abstract aims, they were more likely to suggest that others pursue important, long-term goals, even in the face of immediate difficulties (Freitas, Gollwitzer, & Trope, 2004).
These findings suggest that self-regulatory mindsets can color how people construe newly encountered activities, including even those in which they are not required to act. A practical implication is that considering how versus why to engage in some action could influence markedly the goals one anticipates, and endorses, that others adopt. Simply thinking about how (rather than why) to go on a vacation, for example, inadvertently might lead a supervisor to focus more on the immediate comfort of employees than on employees’ realization of important long-term objectives.

**Mentally Representing Money**

This line of reasoning suggests potentially interesting implications for how people evaluate rewards. Money, for example, is a prime motivator of human behavior, yet it can be represented in fundamentally distinct ways. An abstract view of the utility of money should emphasize its broad, long-term benefits, such as to life stability, whereas a more concrete view should emphasize its more localized and immediate benefits, such as to afford an evening of entertainment. One’s current self-regulatory mindset, then, could impact the criteria by which one judges money, thus impacting how one evaluates it in different contexts.

Changing the order in which questions are asked influences how people interpret them (Schwarz, 1999). Accordingly, we manipulated whether undergraduate participants judged the value of financial rewards (e.g., “How important is it that a campus job have a high salary?”) before or after they judged the value of important long-term benefits (e.g., “How important is it that a campus job provide skills relevant to a long-term career?”). As shown in Figure 2, when first judging financial rewards, participants in an abstract mindset valued them more highly than did participants in a concrete mindset, suggesting that an abstract mindset indeed highlights the important, abstract benefits of money. The opposite result emerged, however, when participants first judged the importance of highly important long-term rewards (such as career training, in a job, or kindness, in a romantic partner). Depending on one’s context, then, thinking abstractly about money can increase one’s value of it, by highlighting its long-term utility, or decrease one’s value of, by highlighting its unfavorable comparisons with even more important, abstract considerations.

![Potential Job](image1)

**Figure 2.** Whether evaluating a potential job (left panel) or a potential romantic partner (right panel), when asked first about financial matters (i.e., one’s salary; a romantic partner’s affluence), participants in an abstract mindset judged financial matters to be more important than did participants in a concrete mindset. However, when first asked about important long-term issues (i.e., one’s career development; a romantic partner’s degree of kindness), these preference differences reversed (Freitas, Langsam, & Acevedo, *under preparation).*
Judging Others’ Qualifications

The preceding discussion of the criteria by which financial rewards are evaluated also bears clear implications for social judgment. Consider, for example, the evaluation of political candidates. Construing action in concrete, procedure-oriented terms (relative to abstract, purpose-oriented terms) should facilitate a relatively narrow representation of what it means to hold political office, thus impacting the breadth of criteria by which candidates are evaluated. In a recent series of studies testing that prediction, participants first rated presidential candidates in terms of (a) ability to carry out specific tasks (e.g., “How effectively would this candidate deal with terrorism?”) and (b) broader personal appeal (e.g., “How interesting would it be having this candidate as an in-law, over for dinner?”). After undergoing the same incidental mindset induction described in the above experiments, subjects lastly judged the candidates’ overall qualifications. As shown in Figure 3, instantiating in research participants a concrete mindset (relative to an abstract mindset) led to evaluations much less dependent on candidates’ broad personality characteristics than on candidates’ perceived ability to carry out specific tasks. When judging others, then, what qualifies as a pertinent qualification appears to depend on one’s self-regulatory mindset and, consequently, on how broadly one construes others’ roles.

![Figure 3](https://example.com/figure3.png)

**Figure 3.** Whether evaluating current candidates (left panel) or a past president (right panel), participants in a concrete mindset were much less likely than those in an abstract mindset to base their overall judgment on politicians’ broad personal appeal (Freitas, Moeller, & Langsam, under review).

These findings suggest that self-regulatory mindsets may help shape a crucial aspect of social judgment: determining which particular pieces of information influence evaluation. Moreover, there may be broader implications for how people think about themselves and others. Viewing one’s failures and successes as reflecting broad aspects of oneself, for example, increases the severity of one’s affective responses to negative and positive self-relevant information (Showers, 1992). When in an abstract mindset, then, even a small failure could be interpreted as related to an important, abstract quality of the self, thus causing a larger emotional reaction. One’s construal level also may impact one’s ability to compartmentalize negative aspects of others (see also Levy, Freitas, & Salovey, 2002). Dealing with unsavory characters, for instance, may be easier when one is in a concrete mindset and able to contain the negativity within relatively unimportant domains deemed irrelevant to a particular interaction aim. In an abstract mindset, in contrast, it should be harder to contextualize and discount such characteristics, because they would seem pertinent to a broader evaluation standard. My students and I currently are pursuing these possibilities. Moreover, other investigators recently have begun replicating and applying this framework to other important real-world phenomena, such as consumer decisions (Agrawal, 2004).
In a conceptual parallel to my work on self-regulatory mindsets, I have examined, with Tory Higgins, Peter Salovey, and others, broad implications of the self-regulatory distinction between approaching opportunities to goal attainment and avoiding obstacles to goal attainment (Freitas, Liberman, Salovey, & Higgins, 2002; Freitas & Higgins, 2002; Freitas, Liberman, & Higgins, 2002; Higgins, Idson, Freitas, Spiegel, & Molden, 2003). As in my mindset work, I have focused specifically on how these different self-regulatory orientations impact the information people attend to and how they construe that information. I also have begun taking a much closer look at how approach-related versus avoidance-related action cues develop in the first place.

Safety in the Familiar

By impacting one’s self-regulatory priorities, a general orientation to avoid negative outcomes versus approach positive outcomes impacts how people evaluate that which they encounter (e.g., Freitas & Higgins, 2002; Freitas, Liberman, & Higgins, 2002). This logic bears relevance to a question of longstanding interest: what underlies the oft-observed preference for familiar over novel stimuli (e.g., Zajonc, 1968)? Some theories suggest that, without need for interpretation, re-exposure to familiar stimuli directly promotes experiences of processing fluency that are inherently positive in valence. That view predicts relative contextual invariance in mere-familiarity effects, in which familiar stimuli always are preferred to unfamiliar stimuli. Alternatively, a self-regulatory focus approach suggests that the value of familiarity might vary greatly as a function of one’s motivational context.

When oriented generally toward avoiding negative events, and therefore biased against pursuing relatively risky strategies, one should be especially likely to value the safety hypothetically signaled by familiarity. When oriented generally toward attaining positive events, on the other hand, and therefore less concerned about negative events and so more interested in pursuing novel, risky, strategies, one should value considerably less such safety connotations. In a recent series of studies testing these predictions, we manipulated participants’ general motivational states generate focused generally on avoiding negative outcomes (such as bad health; prevention focus) or attaining good outcomes (such as good health; promotion focus). Next, subjects rated everyday images for likeability. In a minimal manipulation of familiarity, the images were preceded fleetingly by matching (high familiarity) or mismatching (low familiarity) contour primes. As shown in Figure 4, avoidance-oriented, but not approach-oriented, participants preferred the more highly familiar images.

![Figure 4](image_url)

Figure 4. Participants oriented generally toward avoiding negative outcomes preferred familiar images over unfamiliar images, whereas participants oriented generally toward approaching positive outcomes did not (Freitas, Azizian, Travers, & Berry, in press).
These findings suggest that, rather than being context-invariant, the value of familiarity derives partly from its relation to important contextual features, such as one’s current motivational state. More generally, extant accounts of contextual moderation on evaluation generally center on people’s different attributions for their experiences. In Lazarus’s (1991) influential theory of emotion, for example, the attribution of the cause of a subjective experience is presumed central to its evaluative impact. Our work, on the other hand, suggests that contextual moderation of evaluation does not always require that one first experience some internal cue and then try to interpret its cause. Rather, in the context of a particular motivational state, even before some experience occurs, and thus before it is possible to make an attribution concerning its origins, one may be predisposed to evaluate it favorably.

**Self-Perception of Approach-Avoidance Motivational Directives**

Complementing my ongoing work examining how self-regulatory orientations interact with situational cues to influence judgment and behavior, another strand of my current work examines how such cues acquire meaning in the first place. Everyday life, for example, requires quick decisions about what to approach and what to avoid. To understand one basis of such decisions, I have drawn on traditions examining how people’s behaviors influence their feelings (e.g., Bem, 1972; James, 1884). Although much controversy has surrounded the role of deliberative inference in such processes, a reasonable assumption is that, across time, inferential processes should become automatized, such that typical output eventually is generated through associative priming processes rather than through intervening deliberation. Perceiving oneself to be moving away from something, for example, should directly suggest that the thing you are moving away from is something you need to avoid. In recent work, I am exploring whether a strong version of this claim can help link in a fundamental way motivational processes of approach and avoidance with cognitive processes of selective attention and memory.

**Selective Attention as a Motivational Cue**

Will simply trying to ignore a stimulus be encoded motivationally as avoiding it, facilitating other types of avoidance-related behavior in response to it? In a series of studies testing this possibility, participants were instructed to attend to some aspect of affectively neutral stimulus arrays, while ignoring others. In one study, for example, participants responded to standard color words (i.e., “red”) by vocalizing the color of the font in which they were printed. Thus, if the word’s color and meaning matched, the subject attended to the word’s meaning and pronounced it; if there was a mismatch, the subject ignored the meaning and responded only to the font color. To measure subsequent motivation, immediately after each selection trial, participants were assigned either to push a handle away from themselves (a rudimentary avoidance behavior; see Chen & Bargh, 1999) or to pull it toward themselves (a rudimentary approach behavior) in response to color words printed in black.

As shown in Figure 5, when the cue was a word they had just selectively attended, subjects were much faster to pull the handle toward themselves than to push it away from themselves. The opposite pattern emerged for previously ignored words. As also shown in Figure 5, strikingly similar effects obtained even when subjects responded to a completely neutral cue (e.g., an asterisk) as a function of its location. When a cue appeared in a location previously attended (i.e., at the location of a color patch participants had been instructed to respond to), participants were faster to perform the approach-related behavior. In contrast, when the cue appeared at a location previously ignored (i.e., at the location of a distracting word participants had been instructed NOT to respond to) participants were faster to perform the avoidance-related behavior.
Moreover, follow-up studies found similar effects on subliminal affective priming (Freitas, under preparation-b). When previously ignored color words were presented to subjects (so quickly that they could not report seeing them), subjects were more likely to classify immediately subsequent words as “bad” in meaning. In contrast, when previously attended color words were presented to subjects (again so quickly that they could not report seeing them), they were more likely to classify immediately subsequent words as “good” in meaning. Finally, quite recently, I have found similar effects as a function of intentions to remember versus forget information (Freitas, under preparation-c): Participants are faster to perform the pushing-away movement when encountering a word they previously tried to forget, whereas they are faster to perform the pulling-toward movement when encountering a word they previously had tried to commit to memory.

These studies begin to suggest that people draw important inferences (which quickly and automatically guide behavior) from their own behaviors about what to approach and what to avoid. Because these motivational directives are aimed at simple, affectively neutral stimuli, moreover, the results do not appear to require differences in attention to particular (i.e., good versus bad) aspects of that with which we interact. Instead, our actions alone appear to generate our feelings, building on classic accounts of phenomenological experience (e.g., James, 1884), while shedding new light on motivational processes underlying such basic cognitive operations as selective attention and memory retrieval.

**CONCLUSION**

In summary, complimentary strands of my research help explain how cues in one’s environment acquire motivational meanings that then interact with one’s self-regulatory orientations to guide judgment and action. These processes impact a host of phenomena (such as choosing a president or enjoying an assigned task) important in everyday life. I look forward to examining further both the specific underlying mechanisms and the broader applications of these cognitive-motivational processes.
REFERENCES


