



A Place for Individual Differences in What Everyone Knows About What Everyone Does: Positive Affect, Cognitive Processes, and Cognitive Experiential Self Theory

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Abstract

Individual differences are often incorporated into experimental research to elucidate inconsistent effects. We argue that the inclusion of such differences into established and seemingly straightforward findings is imperative to the goal of reaching a more complete understanding about the processes of interest. Drawing on research on the cognitive effects of positive affect, we illustrate how integrating individual differences in cognitive processing styles to this literature might lead to a more nuanced understanding of the impact of affect on cognitive processes. The addition of individual differences to psychological research should be seen as a means to a thorough scientific comprehension of a topic rather than as burdensome caveats to otherwise straightforward findings.

Generally speaking, social psychologists and personality psychologists differ in the places we look for the causes of behavior. To explain why people do the things they do, social psychologists typically look to the context. Personality psychologists typically look to the person. This difference underlies the central methodological distinction between these subfields. Social psychologists typically use experimental paradigms to demonstrate the causal role of situational factors in producing behavioral differences between people. Personality psychologists, interested in those psychological qualities that people carry with them into (and out of) situations, are more likely to rely on correlational methods.

These differences between the fields of social and personality psychology have been recognized and debated over for a very long time, including during the person–situation debate (Fleeson & Noffle, 2008; Funder & Ozer, 1983). However, the value of each form of inquiry was recognized very early in the development of these fields (Lewin, 1935). Certainly, the methodological boundary between the fields has become fuzzier over the years, with personality psychologists being more prone to use experimental designs and social psychologists, at least informally, coming to view the measurement of individual differences as a viable “Plan B”: an insurance policy in case of inconsistent results.

Still, demonstrations of causation carry an undeniable mental weight. Knowing that differences in A *cause* differences in B is somehow more satisfying than knowing that variation in A *is associated* with variation in B. In this sense, personality psychology might be viewed as at an epistemic disadvantage. Indeed, conclusions based on experimental designs tend to prompt theorizing that bestows an unconditional nature on conclusions. Consider Milgram’s (e.g., Milgram, 1974) famous obedience studies. Those studies demonstrated that many different kinds of people obeyed the commands of an experimenter to shock a learner, perhaps to unconsciousness. The take-home message from Milgram’s work was, essentially, “Anyone

would do it". Of course, although the majority of participants obeyed authority, not all did. Nevertheless, Milgram's findings have come to represent "what everyone knows" about "what anyone would do".

In this article, we argue that individual differences are not simply a good back-up plan in the case of mixed or null results. Rather, even when experimental results strongly support predictions, personality matters. Specifically, we focus on the effects of positive mood on cognitive processes and argue that "what everyone knows" about "how everyone thinks" as a function of positive affect (PA) depends on individual differences. Though focusing on the effects of PA on cognitive processing, we hope to put forth a larger argument about the essential importance of integrating individual difference moderators into even the most straightforward experimental effects. The mood and cognition literature presents an excellent context for our purposes precisely because this literature is characterized by reliable effects and sound conceptual arguments. These very properties of this research may lead to the conclusion that individual differences are unnecessary because things work so well without them. In our view, it is in just such cases that consideration of individual differences must come to the fore.

We begin by reviewing research showing the effects of PA on cognitive processing and explanations of these effects. We suggest that this literature requires a conceptual framework that accounts for the diversity of effects prompted by PA. We argue that Cognitive Experiential Self Theory (CEST e.g., Epstein, 1991, 1994) provides such a framework. A brief review of CEST reveals considerable overlap between the effects of PA and the characteristics of the experiential system as described by Epstein. Next, we review evidence supporting the prediction that the effects of PA on cognitive processes are moderated by individual differences in reliance on experiential processing. Finally, we argue for the necessity of individual differences in the search for scientific truth, even when incorporating such variables may seem to cloud straightforward statements of causation.

What Everyone Knows About Positive Mood and Cognitive Processes

PA refers to pleasant feelings (e.g., happy, cheerful) or being in a good mood. Positive mood is a part of everyday life and readily lends itself to experimental manipulation. PA can be induced using a variety of techniques, including providing success feedback on a task, generating memories of positive experiences, or through music, gifts, or candy.

A large body of research demonstrates the diverse cognitive consequences of PA (see Forgas, 2001 for a review). PA enhances reliance on heuristics and stereotypes (see Bodenhausen, 1993 for review; Bodenhausen et al., 1994; Park & Banaji, 2000; Ruder & Bless, 2003). PA enhances gullibility (Forgas & East, 2008; Ruder & Bless, 2003). It also instills a global focus, "seeing the forest rather than the trees" (Fredrickson & Branigan, 2005; Gasper & Clore, 2002). Numerous studies, employing diverse measures of creativity, show that induced positive mood leads to greater creativity compared to neutral or negative moods (see Baas et al., 2008 for review; Hirt et al., 1996; Isen et al., 1987; Isen et al., 1985). Research also supports the causal role of PA in performance on intuitive judgments of semantic coherence. In these studies, participants are presented with linguistic triads (e.g., snow, base, dance) and are asked to guess as quickly as possible whether or not the triad has a fourth word that unites the other three (e.g., ball). Participants are not asked to produce the common associate but only whether they *feel like* one exists. PA leads to superior accuracy in these judgments (Baumann & Kuhl, 2002; Bolte & Goschke, 2008; Bolte et al., 2003).

In a sense, these diverse findings suggest that what PA does to cognition depends on *the dependent measure* in a particular experiment. The proposed mechanisms underlying these effects have often been tailored to specific outcomes, rather than pertaining to the range of cognitive

consequences of PA. Older explanations relied on decreased processing capacity (Mackie & Worth, 1989) promoted by positive mood or mood management (Taylor, 1991). Such explanations are not germane to the effects of PA on creativity or coherence judgments. Further, though happy people tend to use heuristics, they are also flexible in their processing of information and can switch to a more cognitively challenging strategy when the situation warrants (Bodenhausen et al., 1994; Gasper, 2003; Isbell, 2004; Ruder & Bless, 2003). For creativity and semantic coherence judgments, PA has been suggested to lead to greater spreading of activation in associative networks (e.g., Bolte & Goschke, 2008). However, Storbeck and Clore (2008) demonstrated that spreading of activation is not a distinctive feature of positive mood (compared to neutral mood). Rather, negative affect (NA) appears to be distinctive in its narrowing of activation.

Perhaps, the broadest and most compelling explanation for the effects of PA on cognitive processing is the “affect-as-information” hypothesis (Schwarz & Clore, 1983, 1988). This hypothesis contends that affect provides information about the current situation. PA signals that there are no immediate problems, “all is well”, and default processing can continue unabated. NA signals that there is a problem to be addressed and triggers processing strategies directed at solving that problem (Schwarz, 1990). Clore and Palmer (2009) used a traffic light metaphor for this process. PA serves as a green light allowing automatic cognitive traffic to continue, and NA acts as a red light inhibiting such processing.

The affect-as-information hypothesis is grounded in the notion that affect plays an important adaptive role, calling attention to potential threats and fostering the appropriate cognitive approach to these. This potentially adaptive function of mood is compelling on its face. Yet, if PA is viewed as a safety signal that the person should continue in default processing mode, the diverse effects of PA suggest that this default mode is a surprisingly rich cognitive tool box. Truly understanding and applying this explanation, then, requires knowledge of the contents of the default system. Before considering the content of that system, we take a brief side venture into the implications of suggesting adaptive functions of psychological findings, especially in experimental research.

Functional arguments, experimental findings, and individual differences

Hypotheses linking the effects of mood on cognition to *adaptation* would seem to suggest that, to be adaptive, mood should influence processing in the same way for everyone. Evolutionary arguments are generally and readily posited for features that are shared by members of a species but are more difficult to specify for characteristics on which species members vary widely. For just such reasons, Tooby and Cosmides (1990) expressed great skepticism that individual differences could be viewed as products of natural selection because these differences, by definition, represent within-species variation not invariants. Do cognitive outcomes of PA represent invariants?

On one hand, it makes conceptual sense that PA ought to send the same message to everyone. Yet, in any study, there are exceptions to the conclusions. Saying that PA fosters default processing in many, but not all, people is not heresy but simply a restatement of the conclusion of experiments in this (or any) area. Some people do not respond to positive mood inductions by becoming more reliant on heuristics and stereotypes, by becoming more creative, or more successful at intuitive coherence judgments. Is there something wrong with them? Or is it possible that this variation in responses to contextual changes, too, is adaptive?

Recent evolutionary accounts of reliable individual differences focus on the adaptive significance of variation on psychological characteristics and the costs and benefits they

represent relative to specific environmental features (Buss, 2009; Nettle, 2006; Nichols et al., 2008). It might make sense, from an adaptive standpoint, to have some members of a species who respond to PA as a green light, while others might, instead, stop and reflect or fail to be influenced at all by affective changes.

On another level, it seems potentially perverse to look for the complications of individual differences in straightforward effects. Considering individual differences in established effects may leave the unfortunate impression that one has muddied a previously clear picture, essentially cutting “what everyone knows” in half: Conclusions no longer apply to everyone, but only a subset of individuals. But, again, the fact that conclusions apply to only a subset of people is revealed in any ANOVA table and should not be a particularly surprising point. Understanding the factors that separate those whose responses conform to predictions from those whose responses do not is an important goal of science, leading to increasing accuracy in descriptions of behavior and future predictions about that behavior.

Considering systematic individual differences in experimental effects also helps to move our thinking from the level of variables to the level of persons. Currently, though the influence of PA on cognitive processing is well established, it is not clear whether these effects reflect outcomes that are unified within the same persons. Would those who, for instance, show greater stereotyping also show enhanced creativity if that were the dependent variable of interest? Are the varying effects of PA happening in the same people? Demonstrating reliable individual differences across these effects would add support to the notion that those who show these effects have at least something in common, across studies.

Thus, we might step back and consider the potential individual differences that might account for variation in responses to PA. Further, we might search for a comprehensive conceptual scheme, in which such effects might be unified and through which the rich characteristics of the default processing system can be illuminated. Just such a scheme can be found in CEST, and particularly in Epstein’s (e.g., Epstein, 2008; Epstein, 1994) description of the experiential system.

Cognitive Experiential Self Theory

CEST is a broad personality theory that proposes two processing systems: experiential and rational, each bringing adaptive advantages to the individual. The experiential (or intuitive) system operates preconsciously, is associationistic, holistic, and rapid (Epstein, 1990, 1991, 1994, 1998, 2008). The experiential system is thought to originate in affective associations, representing a long history of learning for the person. The experiential system is reflected in awareness as vague, but compelling gut feelings and intuitive knowledge is experienced as knowing without knowing why. The rational system operates consciously, relies on logic and reason, and is characterized by slower processing. The rational system is intentional and derived from socially prescribed rules of inference and evidence drawn from a conscious appraisal of events.

Readers will likely recognize that CEST bears the markings of the types of dual process models that have been around at least since James (1890/1950). Such models remain popular in modern social and personality psychology (e.g., Bargh, 2007; Chaiken & Trope, 1999; Strack & Deutsch, 2004) and cognitive psychology (e.g., Evans, 2002). Generally speaking, dual process models describe one mode of processing that is intuitive, automatic, implicit, and rapid (sometimes called system 1) and another mode that is analytical, effortful, explicit, and slow (sometimes called system 2).

CEST is different from other dual processing models in two important ways. First, Epstein’s descriptions of each processing system are unusually rich. The first column of

Table 1 lists the various characteristics of the experiential system. Second, and most importantly for our purposes, CEST, as a personality theory, acknowledges and predicts reliable individual differences in reliance on these processing styles. To explore these individual differences, Epstein and colleagues developed the Rational Experiential Inventory (Epstein et al., 1996; Pacini & Epstein, 1999), a self-report measure with two subscales that evaluate reliance on experiential and rational systems, respectively. The scale that measures reliance on the experiential system is the Faith in Intuition scale (Pacini & Epstein, 1999), which assesses the extent to which the individual relies on gut feelings in making decisions (Epstein et al., 1996). A sample item from the Faith in Intuition scale is, "I believe in trusting my hunches". From the perspective of CEST, individuals who report themselves as likely to trust their gut feelings in decision making should demonstrate the various processing styles listed in Table 1.

The experiential system, positive affect, and cognitive processing

The convergence between Epstein's theoretical description of the experiential processing system and the processing styles elicited by PA, as outlined in Table 1, is nothing short of uncanny. Epstein's conceptual description of the experiential system, developed outside the context of mood and cognition research, effectively represents a set of predictions that have found support in the mood and cognition literature. For example, the experiential system relies on heuristics (e.g., Donovan & Epstein, 1997; Epstein et al., 1995; Shiloh et al., 2002), and PA leads to reliance on heuristic cues. The experiential system processes holistically (Epstein, 1994), and PA leads to global focus. Epstein (e.g., Epstein, 1994) described the experiential system as associationistic, and semantic coherence judgments rely on overlearned associations (Kahneman & Klein, 2009). The experiential system is subject to broad generalizations (Epstein, 1994). Happy people are more apt to use broad generalizations (stereotypes) in social judgments. Epstein (1994, 2008) described the experiential system as a source for creativity, and PA enhances creativity.

We propose that this overlap is not accidental but reflects the fact that PA functions to activate the experiential system, to bring its *suite of processing skills* to the fore. Research has shown that PA leads to reliance on general knowledge structures (Bless et al., 1996). The experiential system, as delineated by Epstein, would seem to represent a storehouse of knowledge and processing abilities available to the person while in a good mood.

CEST does not specify precisely how one system comes to dominate over the other on particular tasks. Which processing system is dominant at any given moment has been proposed to depend on a variety of factors including individual differences in the preference for each system and situational factors (Epstein, 1994; Epstein & Pacini, 1999). Considering the overlap between the cognitive effects of PA and the experiential system, the variable responsible for shifting the balance of processing to the experiential system becomes clear: It is PA. Essentially, this analysis suggests that CEST provides a remarkably nuanced picture of the default mode, facilitated by PA, as predicted by the affect-as-information approach.

Incorporating PA as a trigger for experiential processing promises to illuminate the unique attributes of the experiential system. Past research on individual differences in Faith in Intuition has not shown many direct or unique relationships between this individual difference and outcomes (other than heuristic processing and stereotypical thinking; Epstein et al., 1996). Intuitive and rational thinking styles often relate to

Table 1. Comparison of the experiential system and the cognitive effects of PA.

Experiential System (adapted from Epstein, 1991)	Effects of PA	Citations from PA literature
Holistic	Global focus	Isen, 1987; Fredrickson, 2001;
Automatic, effortless	Reliance on less effortful judgment heuristics and scripts	Gasper & Clore, 2002; Rowe et al., 2007
Affective: pleasure-pain oriented	Hedonism	Bodenhausen et al., 1994; Ruder & Bless, 2003;
Associationalistic connections	Enhances performance on overlearned associations	see Isen, 1984 for review; Bless et al., 1996
Behavior mediated by “vibes” from past events	Area for future research	Kunzmann et al., 2005
Encodes reality in concrete images, metaphors, and narratives	Area for future research	Baumann & Kuhl, 2002;
More rapid processing: oriented towards immediate action	Reliance on rapid processing heuristics	Bolte & Goschke, 2008; Bolte et al., 2003
Slower and more resistant to change	Limited evidence suggests happy ppl less likely to correct for their prejudice	see Isen, 1984 for review
More crudely differentiated: broad generalizations; stereotypical, categorical thinking	Use of stereotypes; Top-down processing	Bodenhausen et al., 1994; Devine, 1989
More crudely integrated: dissociative, context specific processing	Creativity and unusual associations	see Bodenhausen, 1993 for review; Bless et al., 1996; Forgas, 2002; Bless, 2000; Huntsinger, Sinclair, Dunn, & Clore, 2010
Experienced passively and preconsciously	Reliance on general knowledge structures	Isen et al., 1985; Isen et al., 1987;
Self-evidently valid: “Experiencing is believing”	Gullibility	Estrada et al., 1994; Hirt et al., 1996;
		see Baas et al., 2008 for review Bless et al., 1996 Forgas & East, 2008

psychological functioning and personality traits in similar ways (Epstein et al., 1996; Pacini & Epstein, 1999). The lack of distinctive effects of Faith in Intuition on outcomes may be due to the fact that PA has not been taken into account. If PA effectively shifts the balance of processing toward reliance on the experiential system, PA should lead to enhanced effects of experientiality on outcomes.

If the experiential system (and its rich array of cognitive strategies) represent the default processing system, then we might say that when the light is green, these many different information processing skills should become available to the person. In addition to this conceptual point, because CEST acknowledges individual differences in reliance on experiential processing, we might expect this disposition to moderate the effects of PA on cognition. That is, we would expect PA to interact with individual differences in reliance on experiential processing to predict outcomes, such that the effects of PA on cognition are strongest (or only observed in) those who are high on Faith in Intuition. Evidence from a growing body of research supports this prediction.

PA and Faith in Intuition

A variety of studies have examined the prediction of various outcomes from the interaction of (measured and manipulated) PA and Faith in Intuition. Although the typical outcomes used in these studies have not drawn directly from the mood and processing literature, some of the effects do map on to that work. For example, recall that PA leads to gullibility. In a series of studies of supernatural beliefs and magical thinking, Faith in Intuition moderated the role of PA in the effects. In one study, participants watched videos of purported ghosts and UFOs. After watching the videos, participants indicated the extent to which they believed the videos really were ghosts and UFOs. Results are shown in Figure 1. Those who were highly intuitive and in a positive mood (via a mood induction) reported higher levels of belief in the videos (King et al., 2007, Study 1).

In subsequent studies, happy, intuitive people demonstrated behavioral indications of sympathetic magic (Rozin et al., 1990). Sympathetic magic refers to a variety of common magical beliefs and practices in traditional cultures (Rozin et al., 1986; Rozin & Nemeroff, 1990) and relies on the formation of simple associations between objects (for instance, between a person and a voodoo doll of that person or between a person and that person's clothing). The law of similarity states that objects that resemble each other share fundamental properties, whereas the law of contagion states that objects that have come into contact can

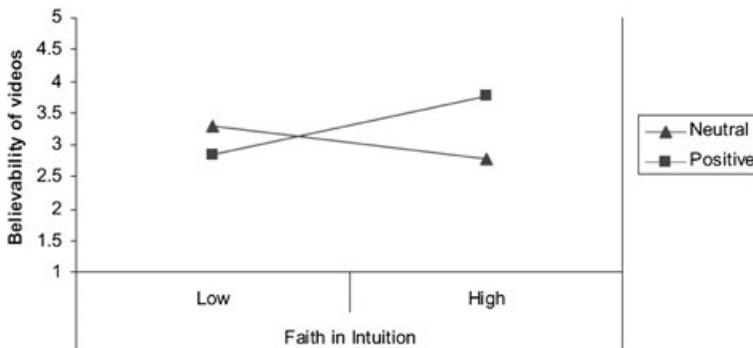


Figure 1. The interaction of induced affect and Faith in Intuition predicting believability ratings for videos of ghosts and UFOs. From King et al. (2007).

exchange essences. In one study, Faith in Intuition and naturally occurring PA predicted lower accuracy in throwing darts at a picture of a baby (demonstrating the law of similarity; King et al., 2007, Study 2). In another study, participants were asked to set up chairs for an interaction with a partner who, they'd learned, had stepped in excrement earlier in the day. Intuitive individuals who were also in a good mood set the chairs further apart (demonstrating the law of contagion; King et al., 2007, Study 3). In a separate investigation, a similar pattern emerged predicting referential thinking (ascribing personal meaning to patently meaningless events, measured with items such as "Traffic lights usually turn red because I am driving in a hurry"; Lenzenweger et al., 1997). Naturally occurring PA interacted with intuition to predict referential thinking (King & Hicks, 2009).¹

More recently, researchers have examined the moderation of the relationship of PA to outcomes that are more directly relevant to the mood and cognition literature. In one study, participants were randomly assigned to mood conditions and were asked to evaluate the likelihood that a target would pursue a stereotypically masculine (i.e., engineering) or feminine (i.e., education) major in college. The target descriptions were identical except for the target's name, revealing his/her gender. Results showed that PA led to endorsement of stereotypical majors as a function of Faith in Intuition (Trent & King, 2013). Additional evidence shows that following a positive mood induction, intuitive individuals were more likely to demonstrate global (vs. local) focus (Mitchell et al., 2012), similar to the pattern shown in Figure 1.

Finally, in a study of semantic coherence judgments (Hicks et al., 2010, Study 3), participants were randomly assigned to a positive or neutral/freestanding mood induction and then completed the semantic coherence task. Results for a measure of signal detection showed that, in the absence of main effects for PA or Faith in Intuition, the effect of mood condition on accuracy was moderated by reliance on intuition. PA led to greater accuracy on the task as a function of Faith in Intuition.

Although this body of research is still in its infancy, it is interesting to imagine a set of dream studies that showed, for instance, similar moderating effects for Faith in Intuition in, say, the relationships between PA and all of its cognitive consequences. If Figure 1 approximated the results for those studies, what would we know that we do not already? Finding that PA relates to cognitive outcomes for only a subset of individuals, is, again, something we (should) already know so this would not be the innovative conclusion of those dream studies. Rather, identifying an individual difference variable that explains that variation would be the important contribution. Showing the same individual difference functioning to moderate the effects of mood across diverse contexts would suggest that these effects can indeed be encompassed in a unifying conceptual scheme. Though such studies would not demonstrate that it is the "same people" who respond to PA in these different ways, they would suggest that it is the same type of people who do so.

Implications

Integrating CEST into the mood and cognition research is important for a number of reasons. First, this integration brings a coherent conceptual framework around which to understand the mood and cognition literature. The label "automatic pilot" would seem to belie the rich capacities of the default processing mode. An interesting question to consider at this point is why it is that the default processing system (i.e., the experiential system) possesses these capacities. We suggest that these represent the rich tools necessary for survival, reflections of associative learning, and, perhaps, innate cognitive architecture suggesting an implicit physical reasoning system (Baillargeon, 2008; Luo & Baillargeon, 2005; Luo et al., 2009), that predates the development of reflective thinking. These various capacities tie us to the external world in important ways.

Second, this synthesis of these divergent literatures allows the consideration of a number of innovative predictions. CEST suggests several additional characteristics of the experiential system that might be facilitated by PA but have yet to be addressed. Such examples are noted as “areas for future research” in the second column of Table 1. Of course, the expansion of ideas that stems from this potential integration is a two-way street. Research on the effects of PA is a diverse literature, and the outcomes associated with PA might well provide further clues as to the properties of the default system. Future research might explore the role of individual differences in intuitive processing on the effects of PA on cognition, motivation, and social behavior, and such research might well inform CEST.

On a more general level, our approach suggests that individual differences (not simply those considered here) have an important role to play in seeking a comprehensive understanding of human behavior. Incorporating individual differences into experimental research ought not to be a last resort in the face of inconclusive or mixed results. Individual differences matter to experimental research, even when results strongly support predictions.

Ironically, considering individual differences in responses to experimental manipulations might illuminate differences in responsiveness to manipulations (e.g., Thrash et al., 2010) as well as differences across various manipulations. For instance, as noted above, PA can be induced in numerous ways. Although generally all of these have been treated as a single type of situation because they all produce PA, attention to individual differences might reveal meaningful differences across these manipulations.

Wider recognition of the existence and implications of the characteristics people bring with them into experimental studies may have a final salubrious effect on research practices. Recently, concerns throughout the science of psychology have erupted around the lack of replicability of experimental effects. Many critics have noted the role of very small samples in this replicability crisis (Button et al., 2013; Evans & Buehner, 2011; Schimmack, 2012). At the very least, when researchers take seriously the importance of individual differences, they might be less likely to trust that random assignment will produce equivalent groups in very small samples.

The necessity of individual differences for science and adaptation

It is perhaps a frustration for personality psychologists that research on individual differences is almost inevitably couched in the methods and language of correlational research. Variables are correlated, predictive, or associated but very rarely causally related. The conclusion that “it depends” is admittedly less satisfying than a straightforward causal explanation. Nevertheless, getting closer to the truth of human behavior requires such language. How does PA influence cognition? It depends. This is not tentativeness or bet hedging but rather describing phenomenon with precision and ever more exacting accuracy. At the intersection of personality and social psychology, the question should not be whether personality matters to experimental results. It always does. The question, even in the face of straightforward main effects should be, which individual differences explain the variation observed, and how and why they do so (King, 2013).

Understanding the systematic character of differing responses to the same contextual changes is an important scientific goal. Personality psychology offers a host of reliable measures, providing methods for clarifying when and for whom conclusions apply. Quantitative techniques allow for tests of moderation that retain the continuous natures of these individual differences (Aiken & West, 1991). Moreover, theories of individual differences are vital conceptual tools for understanding the systematic character of this variation. Consistent and

apparently conclusive experimental evidence coupled with conceptual arguments that make such good sense that they find a comfortable place in an adaptive scheme should be viewed as the green light for considering individual differences in these effects. In the face of the most pleasingly significant main effects, researchers might remind themselves of the wisdom of Kurt Lewin (Lewin, 1935, p. 796):

(G)eneral laws and individual differences are merely two aspects of one problem; they are mutually dependent on each other and the study of one cannot proceed without the study of the other”.¹

Short Biographies

Chad Burton received his BA from Southern Methodist University in Dallas, and his PhD from the University of Missouri, Columbia. He is a postdoctoral fellow in psychiatric epidemiology at the University of Pittsburgh Medical Center. His research interests include substance abuse and health outcomes especially in sexual minority youth.

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Laura King received an AB from Kenyon College in Gambier, OH, MA degrees from Michigan State University and the University of California, Davis, and a PhD from UC, Davis. She taught at Southern Methodist University for 9 years before moving to the University of Missouri, where she is currently a Professor of Psychological Sciences. Her research in personality psychology has concerned well-being, meaning in life, and the integration of Cognitive Experiential Self Theory in varied domains in social and personality psychology.

Endnotes

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¹One issue that we have do not address here is the possibility that PA might simply facilitate the person's dominant response tendencies in a given situation (Hunstinger, Sinclair, Dunn, & Clore, 2010; Huntsinger, 2012; Huntsinger, Clore, & Bar-Anan, 2010). In studies by King et al. (2007) on paranormal beliefs and magical behaviors, this possibility was tested using individual differences in need for cognition. No support was found for the prediction that PA would enhance system 2 override for the dependent measures used.

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