VALUES, SITUATIONAL NEED CONSTRUALS, AND WELL-BEING:
RELATIVE INTRINSIC TO EXTRINSIC VALUES PREDICT PERCEIVING
MORE OPPORTUNITIES FOR SATISFACTION

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MIKE PRENTICE
Dr. Kennon Sheldon, Dissertation Chair
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The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

VALUES, SITUATIONAL NEED CONSTRUALS, AND WELL-BEING:
RELATIVE INTRINSIC TO EXTRINSIC VALUES PREDICT PERCEIVING
MORE OPPORTUNITIES FOR SATISFACTION

presented by Mike Prentice, a candidate for the degree of Doctor of Philosophy, and hereby certify that, in their opinion, it is worthy of acceptance.

________________________________________
Professor Kennon Sheldon

________________________________________
Professor Laura King

________________________________________
Professor Laura Scherer

________________________________________
Professor Todd Schachtman

________________________________________
Professor Paul Bolls
VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

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Abstract

The link between relative intrinsic to extrinsic value orientations and psychological well-being is now well-established, and it is understood that need psychological satisfaction plays a key role in this outcome. It is an open question whether values generate personality-construal or –contact effects for situational need satisfaction (or both). Studies 1-3 (N = 408) employed both cross-sectional and prospective designs to examine whether situation experience does indeed intervene in the process by which values predict need satisfaction and well-being. Studies 4-6 (N = 353) engaged the question of whether the experience of daily situations are primarily informed by contact with situations that are objectively need rich/deficient, or subjectively construed as such. Results of Studies 1-3 provide evidence that situation experience explains relative intrinsic to extrinsic value orientations prospective effect on well-being. Results of Studies 4-6 suggest that values may do so via personality-construal processes such that high levels of intrinsic (relative to extrinsic) valuing leads to an optimistic construal, whereas high levels of extrinsic (relative to intrinsic) valuing may lead to missing situational need opportunities that are objectively present. Implications for research on values, well-being, and personality development are discussed.

Keywords: intrinsic goals; extrinsic goals; situation construal; need satisfaction; well-being; situation contact
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Values, Situational Need Construals, and Well-Being: Relative Intrinsic to Extrinsic

Values Predict Seeing More Opportunities for Satisfaction

What people value, the personal pursuits that they find important and states of the world that they want to create or see realized, have important implications for psychological functioning at all levels of human psychology. At the group level, values inform the behavior of cultural organizations ranging from entire societies grappling with foreign policy down to small groups of friends deciding a weekend activity. At the individual level, values inform not only the kinds of behaviors people will enact when situations present opportunities to act in value-consistent ways, but also the physical and psychological well-being people report about their day-to-day lives. For the past two decades, psychological research has repeatedly found that when people’s concerns for materialistic or “extrinsic” values (e.g., for amassing money and power) begin to approach or overshadow “intrinsic” values (e.g., for building strong social bonds or communities), their well-being declines (Kasser, 2002). A recent study of the effect in over 250 samples from all populated continents provided convincing evidence for the negative relation between materialistic valuing and well-being (Dittmar, Bond, Hurst, & Kasser, 2014), and other studies have provided evidence that extrinsic values play a causal role in decreased well-being over time (Kasser et al., 2013).

Why might values impact well-being in this way? One possibility that has received support from empirical research is that having materialistic goals orients people
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away from seeking opportunities to satisfy basic psychological needs for autonomy, competence, and relatedness (Deci & Ryan, 2000; Dittmar, et al., 2014). Not only can values impact the extent to which people’s daily pursuits may hold promise for psychological need satisfaction, they may also inform attentional biases and behaviors in daily situations in ways that people may not be aware of (e.g., Papies, Stroebe, & Aarts, 2008; Shah, Friedman, & Kruglanski, 2002; see Dijksterhuis & Aarts, 2010 for a review). Thus, values and goals may act through both implicit and explicit routes to orient people to experience daily situations in ways that have important implications for their psychological need satisfaction and well-being. In the present research, I propose that situational experiences might explain the link between values and well-being, and I also explore to what extent such an effect might be attributable to whether values inform how people idiosyncratically perceive or find themselves in situations in ways that are relevant to need satisfaction.

Values, Need Satisfaction, and Well-Being

Values and Their Organization. Values in psychology are typically characterized as abstract ideals that people use as guiding principles for their lives and anchors for their conceptions of the good (e.g., Allport, Vernon, & Lindzey 1960; Rokeach, 1968). Schwartz’s (1996) cross-cultural model of values further suggests that values function in part to balance the motivational resources for pursuing the satisfaction of individual- and group-level needs for optimal multi-level functioning. Early studies of values provided important glimpses into what values people hold and how they prioritize them (Allport et al., 1960; Rokeach, 1973); however, they did little in the way of
explicating how values are generally structured in people’s minds. The circular model developed by Schwartz (1992) provided a correlational organization for values that expresses this structure. Specifically, it appears that values fall on two orthogonal dimensions and can be placed around a circumplex. One dimension represents the balancing of pure self-interest (self-enhancement) or the interest of something beyond the self (self-transcendence). The other dimension appears to reflect the balance between maintenance of the status quo (conservation) versus pursuing fulfilling intellectual and emotional experiences (openness). Note there are different ways of conceptually dividing the circumplex, or “slicing the pie” (cf. Schwartz et al., 2012), but this particular conceptual frame is relevant for the present purposes.

In a similar attempt to map the content and organization of values, Grouzet and colleagues (2005) also uncovered a circumplex similar to the one Schwartz (1992) found. The circumplex is composed of two orthogonal dimensions, one reflected by the poles of intrinsic (e.g., affiliation, community feeling) versus extrinsic (e.g., material wealth, popularity) goals, and another represented by the poles of physical versus self-transcendent goals. Again, the patterns of the correlations between aspiration domains were consistent with a circular model; adjacent aspirations were compatible and opposite aspirations were conflicting. Further, the aspiration domains appeared conceptually similar to those uncovered by Schwartz (1996). For example, intrinsic concerns for community feeling may be analogous to self-transcendence in the Schwartz model, while extrinsic concerns for financial success may be analogous to self-enhancement in the
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Schwartz model, and these conceptually similar dimensions across models are correlated quite highly, $|r_s| > .60$ (S. Heintzelman, personal communication, August 6, 2014). Thus it appears psychological science has made a great deal of progress in the past half century, and especially the last two decades, illuminating the content and structure of human values. Both the Schwartz (1992) and Grouzet et al. (2005) models have been shown to function adequately cross-culturally (Grouzet et al., 2005; Spini, 2003) and point to very similar sets of values and structural organization. Finally, experimental evidence supports theorized motivational dynamics revealed by these correlational models (e.g., Bauer, Wilkie, Kim, & Bodenhausen, 2012; Maio et al., 2009; Vohs, Meade, & Good, 2006).

Values and Well-Being. Traditionally, theories of motivation held that a person should experience well-being, to the extent that the person simply makes progress on the goals he or she sets, without particular regard for the contents of those goals (e.g., Carver & Scheier, 1998). Thus, values researchers were not in the habit of investigating which goals might be more or less conducive to well-being. However, Kasser and Ryan (1993) began to investigate the consequences of valuing financial success, an extrinsic aim, more than intrinsic aims like affiliation or contributing to one’s community. In this landmark study Kasser and Ryan found that people who prioritized financial success reported lower well-being and exhibited lower global functioning. Research over the past two decades has continued to reveal detrimental associations of placing too much emphasis on extrinsic relative to intrinsic goals, as well as the benefits of a relative emphasis or intrinsic to extrinsic goals (see, e.g., Deci & Ryan, 2000; Kasser, 2002). Summarizing
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these last two decades of research, a recent meta-analysis of the effect of holding an extrinsic, relative to intrinsic, value orientation on well-being (k = 66, n = 13,971) revealed a reliable negative effect on well-being across various measures of well-being (Dittmar, et al., 2014).

Values and Need Satisfaction. From the perspective of self-determination theory (SDT; Deci & Ryan, 2012), prioritizing extrinsic aims should be detrimental because such pursuits are not organismically congruent. That is, they do not orient people to engage in activities that are likely to satisfy basic psychological needs for autonomy (the experience of the self as the initiator of behavior), competence (the experience of effectance and mastery), and relatedness (the experience of feeling socially connected and cared for, akin to the need for belongingness) that are fundamental to thriving (Deci & Ryan, 2000; Kasser, 2002, Sheldon & Kasser, 1995; 1998; Ryan & Deci, 2008). However, until fairly recently, the hypothesis that values affect well-being through need satisfaction was an untested aspect of the model generated out of SDT (Kasser, 2002). However, Niemiec et al. (2009) measured recent college graduates’ intrinsic and extrinsic values and then followed up on their need satisfaction and well-being one year after graduation. Their results revealed that intrinsic values predicted to the satisfaction of psychological needs, which in turn predicts well-being. Extrinsic values, on the other hand, were unrelated to need satisfaction, and thus to well-being, and were actually directly positively related to indices of psychological ill-being, such as depression and anxiety. These trends were revealed in a cross-sectional analysis, as well as a longitudinal one that demonstrated that changes in attainment of intrinsic and extrinsic goals
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explained changes in need satisfaction and indices of psychological health. This research provided empirical support for the hypothesis that people’s intrinsic and extrinsic values inform their psychosocial experiences in important ways for need satisfaction. The meta-analysis by Dittmar et al. (2014) also replicated Niemiec et al.’s (2009) cross-sectional findings. In summary, there is now solid evidence for the hypothesis that values impact well-being in part by leading people to (or away from) need satisfying experiences.

**Situation Experience, Contact, and Construal**

Psychologists have long posited that personality may lead people to systematically construe their situations in particular ways as well as to choose and create their situations (e.g., Allport, 1961). In the cases in which personality generates systematic situational choice or creation, this can be considered *situation contact*. When personality might lead to particular perceptions that may not be shared by other observers, this can be considered *situation construal* (as in Rauthmann, Sherman, Nave, & Funder, 2015). For example, situation contact is evident when the highly achievement motivated student finds herself frequently in situations that require peak performance. Situation construal is evident when this same student perceives opportunities to reach a standard when others do not generally perceive such an opportunity. Both construal and contact processes can have important implications for important outcomes, for example, from cooperation in one-shot dilemmas to the accrual of consequences over a lifespan. However, with the exception of the Big Five (Rauthmann et al., 2015), to date little research has examined to what extent participant reports of their experiences are primarily functions of construal or contact. Part of the reason for this dearth of research is
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due to the fact that situation contact and construal are naturally conflated in people’s in situ self-reports of their experiences. According to the Situation Perception Components Model (Rauthmann, 2012), people’s in situ reports contain variance attributable to the perceiver’s general view of the situation, the extent to which situations differ in how they are perceived, and the person × situation interaction reflecting the perceiver’s unique view of a particular situation. Thus, it is impossible to decompose these sources of variance via typical self-report methodologies.

**Situation Experience and Construal.** Construals reflect impressions of situations that are unique to particular perceivers as distinguished from how others perceive the same situations. Some examples of personality-construal effects include the findings that people with open/intellectual traits construe their situations as holding more opportunities for intellectual engagement (Rauthmann et al., 2015), that rejection-sensitive relationship partners construe partner rejection in ambiguous cues (Downey & Feldman, 1996), and that people with high subjective well-being construe situations as more positive (Sherman, Nave, & Funder, 2013). As noted above, studying construal is made problematic by the fact that people’s in situ reports of their experiences conflate their unique, subjective experiences, and the objective reality of the situation they might share with others. Practically speaking, personality-construals can be operationalized by either holding the situation constant, e.g., by experimental control, or by having ex situ observers rate the descriptions of situations that in situ respondents provide (though see Rauthmann et al, 2015 for broader discussion of personality-construal designs). For example, experimental control over situations for personality-construal research has been
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achieved by having participants rate hypothetical situations, such as the same set of Thematic Apperception Test cards (e.g., Serfass & Sherman, 2013b), or by placing them into controlled lab situations (e.g., Prentice, McGregor, Nash, Peluso, in preparation). Ratings from multiple *ex situ* raters can be aggregated to identify the “objective”, canonico-consensual (Block & Block, 1981), or alpha press (Murray, 1938) component of situations (Sherman et al., 2013). Partiallling the objective reality out of *in situ* ratings then leaves the subjective, or beta press, aspects of situations. If these subjective aspects are systematically related to personality traits, then that provides evidence for a personality-construal effect.

**Situation Contact.** Situation contact refers to the encounter of situations that might be consensually (or “objectively”) viewed as having particular characteristics (Rauthmann et al., 2015). Asking what type of situation a person is in, in an objective sense, is a question about contact. For example, if a colleague approaches their organizational team on a Monday morning and reports that he was in a car accident over the weekend, that team would probably agree that that individual came into contact with a situation that was distressing. The term contact leaves the process question open, as there are many pathways by which a person might end up in situations with particular characteristics. Personality-contact effects are evident when personality systematically leads people to find themselves in situations that have particular objective characteristics. Research on situation contact has found, for example, that high self-monitors prefer to enter situations with clearly defined behavioral guidelines, whereas low self-monitors prefer situations that are congruent with their other traits (Snyder & Gangestad, 1982).
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Other research has demonstrated that extraverts tend to find themselves in more social situations than introverts (Emmons, Diener, & Larsen, 1986; see Ickes, Snyder, & Garcia, 1997 for a review).

Because situations cannot describe themselves, they must be rated by people to understand situation characteristics. However, as noted above, asking only one person to characterize a situation from their experience naturally conflates that individual’s construal and contact with the objective situation type and thus fails to answer the contact question (cf. “the Circularity Principle”; Rauthmann, Sherman, & Funder, in press). As hinted at in the discussion of construal, operationalizations of situation contact that strike a balance of feasibility and validity can be derived from ex situ observer consensus regarding in situ situation descriptions (though other options exist, such as choice paradigms; see Ickes et al., 1997 for a review). The ex situ rating method is in many ways a situation analogue to (very) thin slice personality judgment techniques (Carney, Colvin, & Hall, 2007; as acknowledged in Rauthmann et al., 2015). In this rating method, contact can be further sub-divided into “conservative” contact, in which the in situ ratings are disregarded, and “liberal” contact, in which the in situ ratings are incorporated into the consensus score (Rauthmann et al., 2015).

In sum, there are three important aspects of situations: construal, which reflects unique perception of the situation, contact, which reflects encountering consensually agreed upon situation characteristics, and experience, which conflates these two. Thus, previous research documenting how situations or events might impact need satisfaction via in situ report (i.e., any research that does not attempt to parse experience as defined
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above, e.g., Sheldon, et al., 2001) is equivocal when it comes to discerning whether construal or contact is at play, and thus so is any research attempting to study personality-need satisfaction relations (e.g., Vansteenkiste, et al., 2007).

Overview and the Present Research

Why should intrinsic and extrinsic values have implications for need-relevant situation construal or contact? In general, past research has demonstrated that personality dispositions and induced motivational orientations can influence people’s situation construals (e.g., Kay & Ross, 2003; Sherman, et al., 2013). Although situations likely exhibit a primary influence on forming people’s perceptions (alpha press, Murray, 1938), people’s longstanding motivational orientations and current mood states can guide the allocation of attention to motive-relevant aspects of the situation (Dijksterhuis & Aarts, 2010). People high in a relative intrinsic to extrinsic value orientation (RIEVO) should attend to need promoting aspects of situations because RIEVO indexes an organismically congruent motivational orientation toward basic psychological need satisfaction (Sheldon & Kasser, 1998).

Although the link between values and psychological well-being is now well-established and it is understood that need satisfaction plays a key role in this outcome, it is still unclear whether values incline people to construe or contact need satisfying situations (or both). The present studies propose to better understand this process by first examining how need-relevant situation experiences may play a role in the experience of need satisfaction itself. If need-relevant situation experiences do play a role in the actual experience of need satisfaction and well-being, then the next question is to answer is
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whether this is primarily attributable to construal or contact processes. Specifically, the studies presented herein will examine whether values lead people to experience day-to-day situations that are more or less relevant for psychological need satisfaction, in part by building on recent developments for measuring and taxonomizing the psychological situation, especially as it pertains to psychological needs (as in Sherman, Nave, & Funder, 2012). If values index in part how people construe the affordances that are objectively present in their environments, then that construal should be related to the extent to which they actually experience satisfaction and ultimately reap the well-being benefits. In Studies 1-3, I examine whether situation experience does indeed intervene in this process, and Studies 4-6 engage the question of whether the experience of daily situations are primarily informed by contact with situations that are objectively need rich/deficient, or subjectively experienced as such. Stated differently, this research will also address whether the effect of extrinsic, relative to intrinsic valuing, on need satisfaction primarily arises from selection out of situations that are beneficial to psychological needs altogether, or whether values might inform perceiving or missing need satisfaction opportunities that are right under people’s noses all along.

Study 1

The basic process model suggested by Dittmar et al. (2014) and Niemiec et al. (2009) is such that values predict well-being via need satisfaction. Study 1 was designed as an exploratory study to examine whether this process holds because valuing predicts the extent to which people experience daily situations that are relevant to need satisfaction. The conceptual model is shown in Figure 1.
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Method

**Participants.** Participants were 128 MU students (79 female) enrolled in a psychology course who completed measures over the Internet in a single session for partial course credit. Some participants did not complete all measures, leaving a sample maximum of 123 for the focal analyses.

**Measures. Value orientation.** Participants completed two 30-item measures of intrinsic and extrinsic values (Sheldon & Kasser, 2008; based on Kasser & Ryan, 1996), once for how much they were actively pursuing each value and once for value importance (see Sheldon & Krieger, 2014) on 1 to 5 scales ranging from low to high effort/importance. An example of an extrinsic value item is “I will have people comment often about how attractive I look.” An example intrinsic item is “I will have deep, enduring relationships.” Because the distinction between value effort and importance is not focal to the present study, the ratings were averaged. Next, participants’ averages for the extrinsic items were subtracted from intrinsic averages to provide a measure of relative intrinsic versus extrinsic value orientation (RIEVO) as in Sheldon and Kasser (2008) and Prentice and Sheldon (2015). Descriptives for all measures appear in Table 2.1

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1 Difference scores are often not preferable from a model specification perspective because they impose unreasonable constraints. For example, and of primary concern presently, is that a difference score implies equal and opposite effects of the score’s components on outcomes (Edwards, 2001). Examination of Table 2 suggests that in the present case across measures, and most importantly in terms of the effects of IVO and EVO on situation experience outcomes, this assumption is generally tenable. Because RIEVO does not seriously violate the constraints it implies, I maintain it throughout.
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Need satisfaction. The Balanced Measure of Psychological Needs (Sheldon & Hilpert, 2012) is an 18-item measure of current satisfaction and dissatisfaction of autonomy, competence, and relatedness (thus 6 subscales related to the dis/satisfaction of each need). Respondents rated statements about whether “during the last week” they were feeling that “I took on and mastered hard challenges” (competence satisfaction) or “I had a lot of pressures I could do without” (autonomy dissatisfaction) on a scale from 1 not at all true to 7 very true. A summary measure of current need satisfaction was created by subtracting the mean of the dissatisfaction subscales from the mean of the satisfaction subscales.

Well-Being. Participants completed the 20-item Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), which contains two 10-item scales that assessed participants’ current positive (e.g., “inspired”) and negative (e.g., “nervous”) affect rated from 1 strongly disagree to 5 strongly agree. Items referred to the extent to which the feelings described their current experience. A well-being score was generated by subtracting the mean of the negative items from the mean of the positive items.

Situation Assessment. Participants completed the Riverside Situational Q-sort (RSQ; Sherman, et al., 2010). Participants described three of their situations from the previous day at 3, 7, and 11 pm. Following the procedures described in Sherman, et al. (2012), if participants were transitioning between situations, they were asked to select only one. If participants were sleeping during the time, they were asked to describe the situation they were in immediately before or after going to sleep. Participants then created Q-sort piles from the deck of descriptors by dragging each descriptor card into
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one of nine piles labeled from [1] extremely characteristic to [9] extremely uncharacteristic. For each of the 1-9 piles, participants could place a maximum number of cards of 4, 7, 12, 15, 18, 15, 12, 7, and 4, respectively, to generate a normal-like distribution of description extremity. Previous research with the RSQ has derived a measure of the need satisfying relevance of the situation by having researchers educated in self-determination theory’s mini-theory of needs rate the descriptors for how prototypically autonomy, competence, and relatedness-promoting the situations potentially were (Sherman et al., 2012). Due in part to the fact that these measures were derived post hoc from the descriptor set, other descriptors were derived rationally from SDT to augment these measures and more directly assess the need constructs. Items for this augmented set of situational need satisfaction descriptors are provided in Table 1. The scales for each situational need tended to be reliable within situation (average $\alpha = .74$, range = .55 to .85), and showed good reliability across situations (see Table 2)$^2$. Given this cross-situational reliability, aggregate promoting and thwarting scores were calculated by averaging scores across the situations. Finally, a summary satisfying/thwarting balance score was calculated by subtracting the thwarting score from the promoting score.

$^2$There were a few minor differences in RSQ items from that employed by Sherman et al. (2013) due to different versions of the RSQ used currently vs. Sherman et al. For example, one competence thwarting item I employed stated “Situation is uncertain” rather than “Situation is uncertain or complex” as in Sherman et al.
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Results

Table 2 presents the correlations between the study variables. As in past research, RIEVO was positively correlated with current need satisfaction and well-being. Importantly, RIEVO was also positively correlated with the summary measure of the need relevance of situations. Thus, the hypothesis that RIEVO relates to the experience of situations as need relevant was supported.

The primary hypothesis was that RIEVO’s relation to well-being may be explainable by the fact that RIEVO predicts the extent to which people experience situations that are conducive to need satisfaction, which in turn results in greater need satisfaction and thus well-being. This proposition was modeled in PROCESS (Hayes, 2013), specifically model 6, which tests for multiple mediators operating in serial. RIEVO was entered as the primary predictor, with situation need relevance and current need satisfaction working in serial to predict well-being. As displayed in the first panel of Figure 2, there was support for the hypothesized effect in that there was a significant indirect effect of RIEVO through need relevance and subsequently need satisfaction to predict well-being. Notably, the indirect effect from RIEVO to well-being from need relevance alone was not significant. This finding suggests that exposure to the potential for need satisfaction is not sufficient to produce well-being and that need satisfaction must be derived from the situation. Once these indirect effects were taken into account, the direct effect of RIEVO on well-being was diminished, indicating mediation.
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Discussion

Study 1 provided evidence that values relate to the extent to which people’s everyday situations are relevant to the satisfaction of psychological needs. Specifically, having a relatively more intrinsic than extrinsic value orientation was linked to how need relevant participants reported their situations to be, how satisfied they were feeling the following day, and how well off they were in terms of current hedonic well-being. Further, process modeling suggested that values may be linked to well-being through a process by which higher RIEVO leads people to situations as potentially more need promoting and from which they are able to reap more basic psychological need satisfaction.

Although this initial study provides some evidence for the proposed process, it is important to note that this study does not demonstrate that values predict construal. It could be, for example, that the characteristics of people’s situations cause changes in people’s values, as past research has demonstrated that the experience of insecurity leads people to place greater emphasis on extrinsic relative to intrinsic values (Sheldon & Kasser, 2008), and this is a possibility that cross-sectional research cannot completely rule out. To provide evidence that values are predictive of situation experience, it is imperative to conduct a prospective study in which values are measured prior to the situation exposure and the measurement of need satisfaction and well-being. Study 2 was designed for this purpose.
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Study 2

As noted above, a primary aim of Study 2 is to provide a prospective test of the model presented in Study 1. Measuring values prior to situation and well-being assessments provides opportunity to support the notion values actually predict the experience of situations. 3

Method

Participants. The initial sample was 124 students who completed a premeasure questionnaire for extra credit in a social psychology course. Of the initial sample, 104 completed Time 2 measures. Some participants did not complete all measures, leaving a sample maximum of 99 for the focal analyses.

Procedure. On a Thursday or Friday participants completed a measure of RIEVO. On the following Sunday, participants were sent surveys at 5 pm and asked to report on their situation from 2 pm that day. Participants were asked to complete their surveys by midnight of that Sunday.

Measures. Value orientation. Participants completed the 57-item Aspirations Index (Grouzet et al., 2005), which contains 12 items pertaining to extrinsic goals and 15 items pertaining to intrinsic goals. Participants were instructed to rate to what extent “select a response that indicates how much you actually work on that goal right now in your life, regardless of how important it might be, eventually.” Each statement was rated on a 1 not at all to 9 extremely scale. To what extent are you trying to make each goal

3 Participants also completed a measure of expectations for their situation experiences Sunday at 2 pm on the Saturday prior to their target reports.
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occur right now in your life?” All scale descriptives and correlations for Study 2 are displayed in Table 2.

**Subjective Well-Being.** Participants completed the same measure of affective balance (PANAS) used in study 1. Participants also completed the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), which is composed of five statements such as “The conditions of my life are excellent.” Participants rated the statements on a scale from 1 *strongly disagree* to 7 *strongly agree.* To derive a measure of SWB, the PANAS scores for positive and negative affect and satisfaction with life were z-scored, and then negative affect was subtracted from the sum of positive affect and satisfaction with life (Diener, 1994).

**Situation assessment.** Study 2 employed a Likert-type measure of a subset of the RSQ descriptors used in Study 1. One reason for employing both a Likert-type measure and reducing the set was to reduce the burden on the participants, as the measures were embedded in a lengthy personality questionnaire. Further, research has suggested that Qsorts can suffer from some suboptimal psychometric properties when participant fatigue is a concern, so Likert-type versions can be preferable in such circumstances (Serfass & Sherman, 2013a). The item set was reduced to the indicators of need relevance presented in Table 1 and some fillers, for a set of 25 descriptors. The situational need scores demonstrated acceptable reliability (mean α. = .78, range = .66 to .85).

**Results**

Next, I tested the serial mediator model outlined in Study 1. As shown in Figure 2, the focal indirect effect of RIEVO transmitting its effect to well-being through need
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relevance and then need satisfaction was significant and was the only supported indirect effect. Further, once indirect effects were taken into account, RIEVO’s direct effect on well-being was reduced to nearly zero, suggesting full mediation. In a second model to examine changes in well-being from Time 1 due to situational experiences and need satisfaction, Time 1 well-being was added as a control variable. When the serial mediation was tested, the only significant indirect effect was again that from RIEVO through situational need relevance and subsequent need satisfaction, \( b = .09 \ [.01, .23] \), SE = .06, and the direct effect of RIEVO on Time 2 well-being was reduced to nearly zero, \( b = .01 \ [-.23, .22] \), SE = .12. Finally, testing an alternative mediational model in which well-being generated more positive situational recall revealed that well-being did not mediate the effect of RIEVO on situational need relevance, \( b = .01 \ [-.03, .10] \), SE = .03.

Discussion

A primary aim of Study 2 was to replicate and extend the findings of Study 1 and allow for a test of the predictive effect of RIEVO on situation experience. The study provided evidence that RIEVO predicts subsequent situation experience as it pertains to psychological need relevance, and that this experience in turn explains RIEVO’s predictive links to need satisfaction and well-being. Further, a residual change analysis controlling for Time 1 SWB provided evidence that RIEVO leads to well-being benefit (change) from need-relevant situation experience and the subsequent reaping of psychological need satisfaction. Stated differently, RIEVO predicts the extent to which situations are experienced as potentially satisfying, which translates to reaping boosts in need satisfaction and well-being following salubrious situations. Study 3 seeks to
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replicate and extend Study 2 by again examining the predictive impact of RIEVO on situation experiences, but over a longer interval between the measurement of values and situation experience.

Study 3

The primary aim of Study 3 was to provide a confirmatory test of the model presented in Study 2 over a longer time span. A second aim of Study 3 was to examine whether values also predict what kinds of situations people want. If it can be shown that values are related to aspired-to situation characteristics, then this would suggest that values-contact effects are plausible in that open-ended situation preferences are shaped by values. Thus, Study 3 approached this by also asking participants to characterize an ideal situation.

Method

Participants. At time 1 275 MU students (150 female; M age = 20.2; SD = 2.60) completed measures over the Internet. Surveys were completed at beginning and end of the semester for partial course credit. At time 2, approximately 12 weeks after time 1, 212 completed measures, but due to a clerical error some participants could not be linked to their time 1 survey, and the final sample was reduced to 191.4

Measures. RIEVO and need satisfaction were measured with the same instruments and scoring procedures as in Study 1, with the exception that RIEVO was

4The time 2 remaining sample (M = 0.95, SD = 0.693) was slightly higher than the participant who did not return (M = 0.76, SD = 0.783) on RIEVO, t = 2.02, p = .045. This may be due in part to the fact that RIEVO is linked to cooperative behavior (Prentice & Sheldon, 2015).
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only measured in terms of current effort and not importance. SWB was measured and calculated following the same procedures as Study 2.

**Situation assessment.** Study 3 employed a Likert-type measure of a subset of the Q descriptors used in Study 2. At time 1, to measure the kinds of situations participants aspired to, participants characterized an ideal situation following the prompt: “Describe the situation you would ideally like to be in tomorrow at 8 pm, regardless of what you may be committed to or expect to do.” Descriptives for ideal ratings are presented in Table 3. At time 2, participants provided a retrospective report on their situation experiences from 8 pm the previous day following instructions used in Study 1. Descriptives for these measures are presented in Table 2.

**Results**

To examine how values are related to the need-relevant aspects of situations that people aspire to, I first examined the correlations between RIEVO variables and the need relevant characteristics of the ideal situation ratings from Time 1. For exploratory purposes, intrinsic and extrinsic value scores were also treated independently. As shown in Table 3, RIEVO was positively related to preferring need promoting situations across needs. Breaking the three needs down suggested that this effect may be primarily attributable to relatedness and autonomy, as the correlation between RIEVO and preferring competence satisfaction was near zero (though RIEVO was still related to a negative preference for competence thwarting). Correlations for intrinsic values specifically showed that intrinsic values were positively related to need promoting characteristics and negatively related to need thwarting characteristics. Extrinsic values
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were marginally negatively correlated with overall need relevance, and positively correlated with need thwarting potential in particular. Examining each need separately for extrinsic value orientation revealed that the extrinsic value orientation was most strongly related to relatedness thwarting, followed by autonomy thwarting. Taken together, the results of this analysis suggest that intrinsic valuing is related to a preference for contact with need satisfying situations, whereas extrinsic valuing is related to a preference for contact with need thwarting situations.

Next, I tested the serial mediator model outlined in Studies 1 and 2. As shown in Figure 4, the focal indirect effect of RIEVO transmitting its effect to well-being through need relevance and then need satisfaction was significant and was the only supported indirect effect. As in Study 2, once indirect effects were taken into account, RIEVO’s direct effect on well-being was no longer significant, providing evidence of mediation. In a second model to provide a confirmatory test of the change effects in Study 2, both RIEVO (b = .38, SE = .17, t(179) = 2.24, p = .026) and Time 1 well-being (b = .64, SE = .05, t(179) = 13.02, p < .001) were significant predictors of Time 2 well-being. When the serial mediation was tested, RIEVO’s effect on Time 2 well-being was reduced (b = .24, SE = .15, t(176) = 1.60, p = .111), and the only significant indirect effect was that from RIEVO through situational need relevance and subsequent need satisfaction, b = .08 [.02, .19], SE = .04, model R² = .64.

Discussion

The results of Study 3 provided a confirmatory test of the mediational results of Study 2, in which RIEVO functions prospectively to predict the extent to which people’s
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situations are need promoting and subsequently need satisfying and well-being producing. Thus the answer to the focal research question across these studies “Do values predict whether people experience daily situations as relevant to their needs?” can be answered in the affirmative.

However, important theoretical questions about these effects remain. Studies 1-3 demonstrate that RIEVO predicts situation experience, but as reviewed previously this demonstration leaves it an open question whether RIEVO has its effects on situation construals or contacts. Thus, an aim of Study 4 was to begin to engage this question directly.

Study 4

In order to operationalize the objective situation, a necessary step to being able to isolate construal and contact effects, a consensus view of people’s situations must be identified. One means of doing this is via *ex situ* raters of people’s *in situ* descriptions of situations. For example, in the method presented in Sherman et al. (2013), the researchers averaged the *ex situ* rater consensus to reflect the objective situation and then residualized the participants’ ratings on the consensus score to obtain construals. Rauthmann et al. (2015) extended this methodology such that they delineated Sherman et al.’s *ex situ*-only method as a conservative index of situation contact, and the *ex situ* + *in situ* agreement as a liberal index of situation contact. Here, I employ the same logic of deriving consensus views via *ex situ* raters, but arrive at the consensus view of the situation via a structural equation model that can simultaneously examine construal and (liberal) contact effects. Aside from the simultaneous modeling of contact and construal, the SEM method has a
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number of other benefits over the residualized score methods. First, it assumes a causal
model in which the situation causes experience, thus explicitly modeling alpha press in a
theoretically meaningful way. Second, the consensus view is modeled without
measurement error. And third, the in situ raters’ perspective is not necessarily placed on
equal footing with the ex situ raters. This final point is particularly important because the
in situ rater differs from the ex situ raters not only via construal, but also due to the fact
that that person actually experienced the situation first-hand and faced the adaptive
challenges it may have posed.

Sherman et al. (2013) observed correlations between single items from the RSQ
for a single situation and personality traits that were as high as $r = .16$. They observed
correlations between traits and RSQ ratings aggregated across four situations as high as $r$
$= .25$. These provide reasonable expectations for the proposed analyses. It may be the
case that the various summary measures of need-relevance derived from the RSQ
reported in Studies 1 and 2 allow for higher correlations by reducing measurement error
that may plague the single-item approach employed by Sherman and colleagues.

Method

Three research assistants were provided the brief situation descriptions for the
first situation participants reported in Study 1 (i.e., regarding the previous day’s situation
at 3 pm).$^5$ Research assistants reviewed the description that each participant wrote and

$^5$ Four research assistants began this task at the start of the semester, but one coder suffered a
traumatic psychological episode in the ensuing months. Ratings from this coder were dropped
prior to analysis. Recommendations for ex situ ratings suggest a two-rater minimum (Rauthmann,
et al., in press).
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then rated it using the same Q-sort method that participants followed in Study 1. The research assistants worked different hours in the lab and thus never conferred over the situation descriptions or their progress. By the end of the semester, the three raters coded 84 situations.\(^6\)

**Results**

First, a measurement model was fit to the situation need relevance score in which the latent objective situation predicted the ratings of the three observers as well as the participant’s *in situ* rating. For model fitting purposes, one observer’s regression weight was set to one. This model had excellent fit, \(\chi^2(2) = 0.383, p = .826, \text{CFI} = 1.000, \text{RMSEA} = .000.\)^\(^7\) To examine agreement, the observer ratings were fixed to be equal. This model also fit well, CFI = .994, RMSEA = .032, and did not perform significantly worse than the model in which agreement was not imposed on the data, \(\chi^2(2) = 3.965, p = .138,\) suggesting that the assumption that the raters generally agreed on the situation was met.\(^8\)

Next, a structural model was fit to examine both construal and contact effects for intrinsic and extrinsic values. To test construal, the *in situ* raters’ uniquenesses were predicted from values via the covariance between values and the uniqueness. Further,

\(^6\)This was the maximum n for *ex situ* ratings across the coders. Occasionally and apparently at random, coders skipped over a single situation in the description list, perhaps simply due to losing track of place in the list. Data for these missing ratings were imputed from the other coders’ ratings.

\(^7\)RMSEA is necessarily zero when \(\chi^2\) is less than the model degrees of freedom.

\(^8\)For another description of consensus, averaged absolute agreement between *ex situ* raters was ICC = .65.
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RIEVO can be more explicitly modeled (compared to a difference score) via in an SEM framework by covarying the two orientations, which also allows for specificity for testing contact and construal effects. In sum, the focal tests concern whether the participants construals covary with their values scores (i.e., construal effects) and the objective situation (i.e., contact effects).

This structural model fit the data well, CFI = .989, RMSEA = .037. Standardized estimates from fitting this model to the data can be seen in Figure 3. The only significant effect of values was for extrinsic values to have a negative effect on construals of the need relevance of the situation, $b = -.82$, SE = .34, $t = -2.39$, $p = .017$. In standardized terms, the correlation between extrinsic values and need promotion construal was $r = -.259$.

Next a series of exploratory models were fit to examine potential need-specific effects. The structural model displayed in Figure 2 was fit to autonomy, competence, and relatedness. For autonomy, the model fit was relatively poor, CFI = .903, RMSEA = .081. In this model, the effect of extrinsic values on construal was again the strongest, even if not statistically significant, $b = -.16$, SE = .12, $p = .181$, $r = -.148$. For competence, the model showed excellent fit CFI = 1.00, RMSEA = .00, and the strongest relation in standardized terms was that between intrinsic values and construal, $b = -.17$, SE = .09, $p = .067$, $r = .21$. Finally, in the model examining relatedness, the model fit well, CFI =

$^9_\chi^2 (6) = 6.69, p = .350$
.988, RMSEA = .054, and the strongest effect was that between extrinsic values and participant construal $b = -.35$, SE = .16, $p = .029$, $r = -.25$.

**Discussion**

Study 4 provided an exploratory investigation of the potential for RIEVO to affect need relevant experience via construal or contact. In terms of the overall need promotion score, it appears that values impact situation need experience primarily via a construal effect of extrinsic values such that extrinsic values are negatively related to the perception of the potential to satisfy needs. Breaking the need aggregate down by need revealed that this effect was consistent across the three needs. Together, these results suggest that values impact situation need experience primarily via construal. It is important to note, however, that this exploratory study cannot rule out the possibility that values also affect contact. Given that both situation contact and construal effects should tend to a maximum $r = .30$ and more commonly range from $r = .10$ to .20 (Sherman et al., 2013), the present study was underpowered to reject a null of no contact effect if it had been in this expected range. Further, the demonstration of contact effects may require sampling more situations from people over time. Still, the present study does suggest that construal effects may be more potent than contact effects. In the studies that follow, I attempt to confirm the personality-construal effect of RIEVO in two studies. In Study 5, participants report on experiences from a situation that is naturally objectively rather constant. In Study 6, I take experimental control of the situation in order to rule out residual concerns that Study 5’s effects may yet be due in part to contact effects.
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Study 5

The present study attempts to engage the construal question by holding the objective situation constant. More specifically, participants were asked to report on their experiences of the psychological situation surrounding a mass shared experience, attending a football game. Given the collective focus on the game and rituals surrounding game attendance, it is assumed that the objective features of this situation are relatively the same for most people who attend. Thus, whatever effects personality dispositions have on participants’ reports of the psychological situation are assumed to primarily represent a construal effect.

Method

Participants ultimately completed up to five assessments for the present study: one premeasure and up to four postgame assessments after MU played conference games at home.

Participants

Participants were 100 students enrolled in introduction to psychology who were season ticket holders for MU football, 55 female, \( M \) age = 18.4, \( SD = .65 \). One to two weeks before beginning postgame assessments, participants completed a premeasure in which they completed questionnaires about demographics, personality traits, and prior game experiences from earlier in the season. Participant retention was high, as at least 89 participants completed each postgame assessment. Game attendance was high for the first (88/98 reporting) and second (79/97 reporting) games but declined sharply for both the third (52/95 reporting) and fourth (25/89 reporting) games.
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Premeasure: Values

During the premeasure, participants completed a measure of intrinsic and extrinsic values. As in Studies 1 and 3, the measure asked participants how much they were currently working toward 30 goals (Sheldon & Kasser, 2008), 15 of which reflected intrinsic aims ($\alpha = .89$, $M = 6.19$, $SD = .61$) and 15 of which reflected extrinsic aims ($\alpha = .90$, $M = 4.56$, $SD = 1.01$).

Postgame assessments: Situational characteristics

The games participants rated were conference home games held on weekend evenings or days (all Saturday save for the fourth game, which was on a Friday evening). Participants were emailed links to the follow up survey by noon the following day of the game, and they were allowed until Wednesday night to complete. The postgame measure of situation experience was a Likert-type version of the RSQ. Participants rated 48 statements on a 9-point scale (anchored by extremely [un]characteristic), a subset of which was the situation need experience items in Studies 2 and 3. Reliabilities for the need-relevant measures averaged across time points were comparable to those in Studies 2 and 3, average $\alpha = .65$, range = .52 to .77. Differences scores reflecting the situation’s overall need promoting potential were calculated by subtracting the thwarting score from the promoting score for each need (autonomy $M = 1.83$, $SD = 1.80$, competence $M = 1.03$, $SD = 1.50$, relatedness $M = 3.25$, $SD = 2.17$), and an overall measure of situational need promise was created by averaging these three scores $M = 2.04$, $SD = 1.51$.

10 The remainder of the items covered the Situational Eight DIAMONDS (see Rauthmann et al., 2014).
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Results

Because a primary motivation for the current project was to hold the objective situation constant, observations for each game were only included if participants indicated attending the game. If they did not attend, their data was set to missing. This left 239 valid observations. A series of logistic regressions in which the values measures predicted attendance for each game did not suggest any systematic effect of these variables on attendance. Thus these analyses suggest that the missing at random assumption may be tenable. Below I employ a modeling technique that can accommodate missing at random data, specifically multilevel models using full information maximum likelihood estimation (E. Merkle, personal communication, October 23, 2014). As another measure to maintain situation consistency across waves, I noted that MU won three games and lost one for the games that were assessed, and thus ratings on the lost game were dropped from all analyses.

To begin modeling, I determined whether there was sufficient within-person variability in the primary outcome to motivate multilevel modeling. I constructed a null-fixed-effect model in which there was only a random intercept for each person on the outcome and no fixed effects. This analysis revealed significant variability in the random intercept, covariance estimate = 1.30, SE = .26, z = 5.07, p < .001, and the ICC was large at .57.

I next constructed a mixed effects model in which participant intercept and wave were treated as random effects, and RIEVO and wave were treated as fixed effects. Results from the model in which RIEVO predicted overall situational need promise
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suggest that RIEVO was positively related to the construal of need satisfaction potential during the games (see Table 4). To explore effects specific to autonomy, competence, and relatedness (that may have generated the effects on the need aggregate), I repeated the modeling process outlined above three more times, once with each need. For autonomy, the model did not converge when wave was maintained as a random effect. Dropping the random effect of wave allowed for convergence, and RIEVO bore a positive but non-significant relation to autonomy. For both competence and relatedness, RIEVO was a significant predictor. Together, these results demonstrate that RIEVO bears a consistent positive relation with each of the three needs, but only statistically significantly so for competence and relatedness.

Discussion

The current study aimed to investigate whether value orientations predict the extent to which people construe their psychological situations as having promise for psychological need satisfaction. Participants completed assessments of the psychological situation following 4 home games for their university football team. Because such game attendance entails a mass shared experience of watching the same event in a crowd and partaking in the rituals surrounding the game, it was assumed that the objective situation would be somewhat constant, and what was left to be explained in participants’ reports of the situation would reflect construals that may follow systematically from participants’ values. The results of the present study supported such a construal effect. Across both the aggregate measure of psychological need promise, competence, and relatedness, RIEVO
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predicted a positive construal effect on participants’ perceptions of need promise across three waves of assessment.

Despite the assumption that the focal situation in this study, attending a home football game (and winning) is naturally constant, the current study cannot completely rule out the possibility that values still informed participants’ objective situations. It may be that the intrinsic value orientation still leads people to select into or create more promising situations, for example by selecting a particular friend group to attend with or engaging in different sets of rituals within the game experience. Study 5 also cannot rule out the possibility for contact effects that happened prior to the study and that impact study participation. The participants in this study were all season ticket holders, thus they had already generally decided to contact the situation by initiating behaviors that would allow them to attend frequently.

**Study 6**

The results of the studies to this point suggest that RIEVO’s effect on situation processes are primarily attributable to construal, and Study 5 provided *in vivo* evidence for this construal effect by taking advantage of a naturally constant situation. However, noting the lingering possibilities for contact effects to have impacted the results of Study 5, Study 6 was designed to take experimental control of the situation to rule out alternative explanations for the construal effect. Specifically, in this study participants were provided brief situation descriptions with known objective need potential and were asked to rate those situations according to their need promotion potential.
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Method

Participants and Procedure. Participants were 173 undergraduate students (104 female) who participated for partial course credit. All measures were completed during a single session.

Participants completed measures of values in terms of both importance and current pursuit, as in Study 1. However, here the values measure was considerably shortened to three items for each of the intrinsic and extrinsic orientations (Sheldon & Kasser, 2008).

They were then asked to imagine experiencing a relatedness promoting situation, a relatedness neutral situation, and a relatedness thwarting situation. Relatedness was selected due to its clear consequences for well-being (reviewed in Baumeister & Leary, 1995) and the fact that its situational experience has so far borne the strongest relations with RIEVO across Studies 1-5. The situation descriptions were informed by SDT’s descriptions of thwarting to promoting situations, and they were composed to fit the general brief format of descriptions that participants had offered in their responses over the course of Studies 1-3. A candidate set was pretested for ratings on relatedness promotion and thwarting, and relatedness negative, neutral, and positive descriptions were selected for presentation in the vignettes. The situations were:

Negative: “Arguing with a friend because we aren’t seeing eye to eye.”

Neutral: “Running a quick errand with my roommate to get stuff for our place.”

Positive: “Hanging out with friends in my apartment, talking and joking around.”
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Participants were presented with each description in a randomized viewing order. After each situation imagery exercise, participants completed Likert-type RSQ items concerning the extent to which the situation might promote or thwart relatedness and competence.

Results

Descriptives and correlations are presented in Table 6. As is already evident in this table, RIEVO tends to be related to need-optimistic construals for both positive and neutral situations, but not for negative situations.

Aggregate need promotion scores were submitted to mixed models in which RIEVO was a fixed effect and participant intercept and the situation being rated were random effects. Results of this model are presented in Table 7. There was a significant RIEVO by situation type interaction such that RIEVO was unrelated to need ratings in the negative situation, but was positively related to need promise ratings in both the neutral and positive situations. Simple effects testing revealed that the manipulation of the situation types was successful in that the negative situation was rated as less fulfilling than the neutral situation, b = -1.746, SE = .260, t(174) = -6.71, p < .001, and that the neutral situation was rated as less fulfilling than the positive situation, b = -0.344, SE = 0.142, t(161) = -2.42, p = .017. Further, the simple slope of RIEVO was positive in both the neutral, b = 0.764, SE = .156, t(196) = 4.91, p < .001, and positive conditions, b = 0.810, SE = 0.173, t(197) = 4.69, p < .001, but the slope of RIEVO in the negative condition was not different from zero, b = 0.112, SE = 0.128, t(178) = 0.87, p = .385.
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Discussion

The present study traded off the realism provided by Study 5’s attempt to operationalize an objective situation with constant characteristics *in vivo* for greater experimental control over situation variability via a vignette method. The results of Study 6 suggest that people high on RIEVO construe more potential to satisfy basic psychological needs in situations that objectively hold that potential or are ambiguous (i.e., neutral). This study also provides evidence for a boundary condition on RIEVO’s potential to lead to the construal of need promotion. That is, although RIEVO was related to an optimistic construal in both the neutral and positive conditions, this was not the case in the objectively negative situation. This suggests that people high on RIEVO are not completely blind to situations that are antithetical to need promotion.

**General Discussion**

The present studies had two essential aims. The first was to examine whether relative intrinsic to extrinsic value orientations could predict the way in which people experience their daily situations with respect to the potential those situations hold for promoting or thwarting basic psychological needs. Study 1, a cross-sectional study, provided initial support for the notion that people high on RIEVO have more need-relevant situation experience. Study 1 also demonstrated via process modeling that RIEVO related well-being due to situational need experiences. Study 2 extended the results of Study 1 by demonstrating that RIEVO, measured a few days before a situation encounter, can function prospectively to predict situation experiences. Study 3 extended the results of Study 2 by demonstrating that this prospective effect on experience held
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over a much longer time course, nearly 12 weeks later. Further, Study 3 replicated the previous two studies by showing that RIEVO confers its effect on well-being via situation experience and need satisfaction. Studies 2 and 3 also showed that RIEVO’s prospective effect on well-being (e.g., as in Niemiec et al., 2009) is partly explicable such that RIEVO sets the stage for gains in well-being because people higher on RIEVO experienced their situations as holding the potential to satisfy psychological needs and thus reaped the psychological “nutriments” of need satisfaction as a result.

The second aim of the present studies was to begin to explore whether RIEVO might affect situation experience via situation contact or construal. Study 4 was an exploratory investigation that sought to examine contact and construal effects on situation experience simultaneously by fitting an SEM to ex situ ratings to situations that participants had reported actually experiencing. The results of this model suggested that RIEVO related to situation experience chiefly through construal. Study 5 tested this construal effect by assessing in situ ratings across a series of constant situations that were assumed to exhibit a strong alpha press, the mass shared experience of attending a home team’s football game. The results of Study 5 provided confirmation of the effects revealed in the SEM in that RIEVO was positively related to the extent to which people perceived opportunities for need satisfaction even when the situation was held constant. If RIEVO did not systematically impact need-relevant construal, then one would not expect RIEVO to correlate with perceiving need promoting opportunities when the situation was constant. Study 6 exhibited more control over the situation by experimentally manipulating the need-relevant content of situation descriptions that
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participants rated by employing a hypothetical contact methodology. Thus, Studies 5 and 6 traded off in vivo assessment and situational control. The results of Study 6 again provided evidence that RIEVO predicts optimistic construal of situations. Not only did RIEVO predict the construal of need promoting opportunities when it was “baked in” to the situation in the positive condition, it also did so in a relatively ordinary situation insofar as need promotion is concerned in the neutral condition.

It may be the capacity of people with high RIEVO to imbue banal or ambiguous situations with a potential for need satisfaction that explains RIEVO’s link to well-being on a day-to-day basis. As shown in Figure 4, people with low RIEVO are not completely numb to situational need variability, as they can identify when situations hold non-zero potential to promote needs or are objectively better than a conflicted social interaction. However, even when the situation is objectively quite positive, people low on RIEVO still do not construe as much potential to satisfy needs as people high on RIEVO do when the situation is relatively more ambiguous. This suggests that greater levels of RIEVO may generate a “northern tilt” (Little, 2011) in that they lead to construing need promotion potential into neutral situations and accurately see the potential when it is objectively present in positive situations. Importantly, though, this tilt was not unmitigated in that it was not in evidence in the negative condition. This suggests that, despite their optimistic construals, people high on RIEVO are still in touch with reality when situations might call for an orientation toward other important situational presses, like adversity or deception in the case of interpersonal conflict (cf. Rauthmann et al., 2014).
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This work has important implications for future research and theory for understanding optimal growth and well-being (cf. Sheldon, 2004). According to the corresponsive principle of personality development (Roberts, Caspi, & Moffitt, 2003), dispositions may inform situation experiences (both construal and contact) such that situations reinforce the dispositions that lead people to particular experiences in the first place (Rauthmann et al., 2015). This principle leads to the prediction that as intrinsic/extrinsic values inform situation construals and contacts over time, positive/negative well-being trajectories are likely.

Limitations and Future Directions

The present studies suggest that construal effects may be at least partly responsible for RIEVO’s well-noted effect on need satisfaction and well-being (Dittmar et al., 2014). But future research could examine this possibility more directly, for example, by employing the ex situ techniques and explicitly model both construal and contact effects as they pertain to well-being over time. Although this potential seems apparent in the present Study 4, any such predictive modeling is precluded by the cross-sectional design of Study 1 from which Study 4’s data were derived.

The SEM technique for parsing situation contact and construal is novel, and could be adopted more broadly. Other efforts to extract components of situation ratings have relied on variance decomposition via an ANOVA framework (e.g., Rauthmann, 2012) or residualizing in situ scores on ex situ rating averages (e.g., Sherman et al., 2013). The ANOVA approach overestimates construal (there, the perceiver × situation interaction) because variance that is attributable to construal and to error both contribute to the
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construal score (Rauthmann, 2012). The current SEM approach cannot ameliorate this problem, because the in situ residual is still what is being predicted to obtain personality-construal affects, and this residual contains both uniqueness attributable to construal and measurement error. However, the current SEM approach should be preferred over residualized approaches to construal modeling with ex situ raters because it can extract error from ex situ ratings for a purer measure of the objective situation that is otherwise maintained when scores are simply averaged across raters. Further, when modeling the “liberal” contact effect, this error reduction will have important consequences for the estimation of situational alpha press on participant experiences, and thus for the estimation of the residual term that contains the construal effect.

Also pertaining to the results of the SEM, the model cannot rule out contact effects, partly due to sample size, and the present research more broadly cannot speak definitively about the potential role of RIEVO-contact effects. Still, even if selection effects exist, the present results suggest that, for the current sample, construals were more potent than contacts. However, more research is needed to generalize this claim about the relative strength of construal vs. contact effects. For one, the present results relied on the rating of only a single situation. Whereas construals should be relatively stable within person across situations (as suggested by Study 5), contact effects may accumulate within person across situations. Even if (replicable) contact effects were found to be relatively smaller than construal effects, they should not be ignored or devalued. It is plausible that such contact effects, even if small, could have as much as or more of an impact on important life outcomes than construal effects due to the primacy of alpha press once
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people contact situations and the accumulation of exposure to situation characteristics over a lifespan (Ozer & Benet-Martínez, 2006).

Another means of extending research to examine potential RIEVO-contact effects considers the fact that personality-contact includes not only selection processes, but also creation processes (Rauthmann et al., 2015; cf. Allport, 1961). Research on how personality impacts the psychological situation, rather than vice versa, remains a fairly open frontier, though research often approaches how individuals affect each other psychologically in dyads or groups, and research has begun to examine how people work to craft their jobs in ways that maximize their strengths (Wrzesniewski, 2003; as reviewed in King & Trent, 2012). That value orientations could play a formative role in the psychological situation stands to reason, as values index in part whether people expect or want to cooperate or compete with others (as reviewed in Prentice & Sheldon, in press), such expectations inform actual behavior in social situations (e.g., Kay & Ross, 2003), and the behavior of others in social dilemmas can feed back to inform the perceived norms and subsequent behavior of actors (e.g., Sheldon, 1999; Weber & Murnighan, 2008). Research is currently underway to explore these possibilities.

Finally, a great deal of research on RIEVO proceeds with the untested assumption that it is always a boon. However, this may not always be the case, and it is certainly plausible that the situation may moderate its impact (Block & Block, 1981). Regarding the present studies, for example, there may be a restriction of range in situation variability surrounding collegiate life on a campus in the Midwest that would preclude finding such moderating effects. Other research has suggested that intrinsic values may not be
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unequivocally beneficial when more fundamental needs (e.g., for physical safety) are not well satisfied and the pursuit of intrinsic goals is likely to be frustrate, for example, in a Peruvian slum or a prison (Guillen-Royo & Kasser, 2015; Kasser, 1996). Moving forward it will be imperative to investigate situational boundary conditions on the RIEVO-construal effects demonstrated in the present studies.

**Conclusion**

Over the past half-decade, researchers in social and personality psychology have made large strides in research and theory on the psychological situation. Out of this progress have emerged means for empirically approaching longstanding theoretical questions about personality-contact and –construal processes. The current studies built on this growing body of research to examine whether the well-established link between relative intrinsic to extrinsic value orientations and well-being might be explained by need-relevant situation experiences. Results suggested that high levels of intrinsic (relative to extrinsic) valuing leads to an optimistic construal about the potential to satisfy needs in everyday situations, whereas high levels of extrinsic (relative to intrinsic) valuing may lead to missing situational need opportunities that are objectively present. In summary, intrinsic (relative to extrinsic) value orientations confer their benefits vis-à-vis well-being through both the accurate and exaggerated perception of the potential for need satisfactions, whereas extrinsic (relative to intrinsic) value orientations appear to preclude need satisfaction by leading people to miss opportunities that are right under their noses in everyday life.
VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

Table 1. Q-Sort items assessing aspects of situational need-relevance.

<table>
<thead>
<tr>
<th>Source</th>
<th>Autonomy</th>
<th>Competence</th>
<th>Relatedness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sherman et al. (2012) Promoting Items</strong></td>
<td>Situation allows free range of emotional</td>
<td>Affords the opportunity to demonstrate</td>
<td>Context includes potential for immediate</td>
</tr>
<tr>
<td></td>
<td>expression</td>
<td>intellectual capacity</td>
<td>gratification of desires</td>
</tr>
<tr>
<td></td>
<td>Affords an opportunity to express unusual</td>
<td>Affords an opportunity for demonstrating verbal</td>
<td>Close personal relationships are present or have</td>
</tr>
<tr>
<td></td>
<td>ideas or points of view</td>
<td>fluency</td>
<td>the potential to develop</td>
</tr>
<tr>
<td></td>
<td>Affords an opportunity to express one’s</td>
<td>Context includes intellectual or cognitive</td>
<td>Talking is permitted, invited, or conventionally</td>
</tr>
<tr>
<td></td>
<td>charm</td>
<td>stimuli</td>
<td>expected</td>
</tr>
<tr>
<td><strong>Sherman et al. (2012) Thwarting Items</strong></td>
<td>P’s independence and autonomy is questioned or</td>
<td>P is being criticized, directly or indirectly</td>
<td>P is being criticized, directly or indirectly</td>
</tr>
<tr>
<td></td>
<td>threatened</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P is being pressured to conform to the</td>
<td>P is being insulted, directly or implicitly</td>
<td>P is being insulted, directly or implicitly</td>
</tr>
<tr>
<td></td>
<td>actions of others</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Situation includes implicit or explicit</td>
<td>Situation is uncertain or complex</td>
<td>Someone [present or discussed] is unhappy or</td>
</tr>
<tr>
<td></td>
<td>behavioral limits</td>
<td></td>
<td>suffering</td>
</tr>
<tr>
<td><strong>Rationally-Derived</strong></td>
<td>Allows for P to feel free and can choose</td>
<td>Allows for P to take on and master hard</td>
<td>Allows P to feel close and connected to</td>
</tr>
<tr>
<td><strong>Promoting Items</strong></td>
<td>own behavior</td>
<td>challenges.</td>
<td>others.</td>
</tr>
<tr>
<td><strong>Rationally-Derived</strong></td>
<td>*</td>
<td>Potential for P to feel incompetent or like a</td>
<td>Potential for P to feel isolated from others or</td>
</tr>
<tr>
<td><strong>Thwarting Items</strong></td>
<td></td>
<td>failure</td>
<td>uncared for</td>
</tr>
</tbody>
</table>

Note: * Because an item to reflect Autonomy Thwarting from SDT would essentially repeat the RSQ item “P’s independence and autonomy is questioned or threatened” a novel item was not added here.
VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

Table 2. Descriptives and zero-order correlations, Studies 1-3.

<table>
<thead>
<tr>
<th></th>
<th>Study 1</th>
<th></th>
<th></th>
<th>Study 2</th>
<th></th>
<th></th>
<th>Study 3</th>
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<td>SD</td>
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<td>Mean</td>
<td>SD</td>
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<td>SD</td>
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<td>126</td>
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<td>1.23</td>
<td>275</td>
<td>0.89</td>
<td>0.73</td>
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VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

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<td>RIEVO</td>
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Time 2

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<td>EVO</td>
<td>RIEVO</td>
<td>IVO</td>
<td>EVO</td>
<td>RIEVO</td>
<td>IVO</td>
<td>EVO</td>
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<td>.099</td>
<td>.059</td>
<td>-.118</td>
<td>.196**</td>
<td>.142†</td>
<td>-.089</td>
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<td>Balance</td>
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<td>.213*</td>
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<td>.228**</td>
<td>.143†</td>
<td>-.118</td>
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<tr>
<td></td>
<td>.260**</td>
<td>.158†</td>
<td>-.157†</td>
<td>.218*</td>
<td>.160</td>
<td>-.232*</td>
<td>.112</td>
<td>.175*</td>
<td>.008</td>
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</tbody>
</table>

Note: † < .10, * < .05, ** < .01, *** < .001.
VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

Table 3. Correlations between value orientations and psychological need aspects of ideal situations, Study 3

<table>
<thead>
<tr>
<th>Need Relevance</th>
<th>RIEVO M</th>
<th>SD</th>
<th>α</th>
<th>r</th>
<th>95% CI</th>
<th>IVO r</th>
<th>95% CI</th>
<th>EVO r</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.65</td>
<td>1.71</td>
<td>.330</td>
<td>.220</td>
<td>.432</td>
<td>.346</td>
<td>.237</td>
<td>.446</td>
<td>.098</td>
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<tr>
<td>Need Promoting</td>
<td>6.01</td>
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<td>.73</td>
<td>.143</td>
<td>.025</td>
<td>.257</td>
<td>.299</td>
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<td>.403</td>
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<td>Need Thwarting</td>
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<td>1.50</td>
<td>.89</td>
<td>-.305</td>
<td>-.408</td>
<td>-.193</td>
<td>-.184</td>
<td>-.296</td>
<td>-.067</td>
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<tr>
<td>Autonomy Thwarting</td>
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<td>1.65</td>
<td>.76</td>
<td>-.284</td>
<td>-.390</td>
<td>-.172</td>
<td>-.153</td>
<td>-.267</td>
<td>-.035</td>
</tr>
<tr>
<td>Autonomy Promoting</td>
<td>6.33</td>
<td>1.53</td>
<td>.69</td>
<td>.206</td>
<td>.090</td>
<td>.317</td>
<td>.276</td>
<td>.162</td>
<td>.382</td>
</tr>
<tr>
<td>Competence Thwarting</td>
<td>3.44</td>
<td>1.72</td>
<td>.77</td>
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<td>-.312</td>
<td>-.084</td>
<td>-.153</td>
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<td>-.035</td>
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<td>Competence Promoting</td>
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<td>.67</td>
<td>-.023</td>
<td>-.141</td>
<td>.096</td>
<td>.156</td>
<td>.038</td>
<td>.270</td>
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<tr>
<td>Relatedness Thwarting</td>
<td>2.69</td>
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<td>.66</td>
<td>-.353</td>
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<td>-.197</td>
<td>-.309</td>
<td>-.080</td>
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<td>Relatedness Promoting</td>
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<td>.171</td>
<td>.053</td>
<td>.283</td>
<td>.289</td>
<td>.176</td>
<td>.394</td>
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</table>

Note. N = 274. RIEVO = Relative intrinsic versus extrinsic value orientation. IVO = Intrinsic value orientation. EVO = Extrinsic value orientation.
VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

Table 4. Parameter estimates for each model, Study 5. The response variable appears in bold above each set of estimates.

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
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<td><strong>All needs</strong></td>
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<tr>
<td>Intercept</td>
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<td>.321</td>
<td>67.2</td>
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<tr>
<td>RIEVO</td>
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<td>81.3</td>
<td>2.02</td>
<td>.047</td>
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<td></td>
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<td><strong>Competence</strong></td>
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Note: N = 96. All null model likelihood tests had $\chi^2$s(1) > 29.1, ps < .001. There were no notable effects of wave across models, therefore parameter estimates for wave effects are not displayed.
VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

Table 5. Descriptive statistics and zero-order correlations for structural equation model, Study 5.

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<th>Correlations</th>
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</tr>
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<td>3. Need Promotion, Observer 1</td>
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<td>4. Need Promotion, Observer 2</td>
<td>4.29</td>
<td>3.38</td>
</tr>
<tr>
<td>5. Need Promotion, Observer 3</td>
<td>2.95</td>
<td>4.19</td>
</tr>
<tr>
<td>6. Need Promotion, Participant</td>
<td>3.16</td>
<td>3.23</td>
</tr>
</tbody>
</table>

Note: N = 84. Note: † < .10, * < .05, ** < .01, *** < .001.
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Table 6. Descriptives and zero-order correlations, Study 6.

<table>
<thead>
<tr>
<th></th>
<th>C/R Aggregate</th>
<th>Competence</th>
<th>Relatedness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Positive Situation</td>
</tr>
<tr>
<td>RIEVO</td>
<td>0.81</td>
<td>0.92</td>
<td>.350</td>
</tr>
<tr>
<td>C/R Aggregate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Situation</td>
<td>2.49</td>
<td>2.32</td>
<td>.814</td>
</tr>
<tr>
<td>Neutral Situation</td>
<td>2.13</td>
<td>2.10</td>
<td>-.030</td>
</tr>
<tr>
<td>Negative Situation</td>
<td>0.10</td>
<td>1.55</td>
<td>.084</td>
</tr>
<tr>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Situation</td>
<td>1.88</td>
<td>2.11</td>
<td>.674</td>
</tr>
<tr>
<td>Neutral Situation</td>
<td>1.48</td>
<td>1.85</td>
<td>.096</td>
</tr>
<tr>
<td>Negative Situation</td>
<td>0.15</td>
<td>1.63</td>
<td>-.015</td>
</tr>
<tr>
<td>Relatedness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Situation</td>
<td>3.11</td>
<td>2.74</td>
<td>.805</td>
</tr>
<tr>
<td>Neutral Situation</td>
<td>2.78</td>
<td>2.68</td>
<td>-.151</td>
</tr>
<tr>
<td>Negative Situation</td>
<td>0.37</td>
<td>1.79</td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 173. Critical values for r: α = .05: r = .149, α = .01: r = .196, α = .001: r = .249.
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Table 7. Results of RIEVO × known situation model predicting perceived situational need satisfaction opportunity, Study 6.

<table>
<thead>
<tr>
<th>Parameter Estimates for Fixed Effects</th>
<th>b</th>
<th>SE</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.551</td>
<td>.199</td>
<td>176</td>
<td>7.80</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>RIEVO</td>
<td>0.764</td>
<td>.156</td>
<td>196</td>
<td>4.91</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Negative vs. Neutral</td>
<td>-1.746</td>
<td>.260</td>
<td>174</td>
<td>-6.71</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Positive vs. Neutral</td>
<td>0.344</td>
<td>.142</td>
<td>161</td>
<td>2.42</td>
<td>.017</td>
</tr>
<tr>
<td>RIEVO × Negative vs. Neutral</td>
<td>-0.653</td>
<td>.205</td>
<td>192</td>
<td>-3.18</td>
<td>.002</td>
</tr>
<tr>
<td>RIEVO × Positive vs. Neutral</td>
<td>0.045</td>
<td>.116</td>
<td>174</td>
<td>0.39</td>
<td>.696</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type III Tests of Fixed Effects</th>
<th>Num. df</th>
<th>Den. df</th>
<th>χ²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIEVO</td>
<td>1</td>
<td>200</td>
<td>26.05</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Situation</td>
<td>2</td>
<td>168</td>
<td>58.01</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>RIEVO × Situation</td>
<td>2</td>
<td>183</td>
<td>11.15</td>
<td>.004</td>
</tr>
</tbody>
</table>

Note. N = 173.
VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS

Figure 1. Conceptual model of the proposed process.
Figure 2. Tests of the process model in which RIEVO predicts well-being via the experience of situations as need promoting and need thwarting, Studies 1-3. Results of Studies 2 and 3 are presented without Time 1 well-being as a control.

**Study 1**

Indirect effects:
- RIEVO → SNR → WB: 0.05 [0.00, 0.16]
- RIEVO → SNR → NS → WB: 0.08 [0.01, 0.19]
- RIEVO → SNR → WB: 0.11 [-0.02, 0.23]

Model $R^2 = 0.47, F (3, 114) = 33.80, p < .001$

**Study 2**

Indirect effects:
- RIEVO → SNR → WB: 0.01 [-0.06, 0.40]
- RIEVO → SNR → NS → WB: 0.14 [0.01, 0.32]
- RIEVO → SNR → WB: 0.05 [-0.29, 0.17]

Model $R^2 = 0.57, F (3, 88) = 39.08, p < .001$

**Study 3**

Indirect effects:
- RIEVO → SNR → WB: 0.02 [-0.06, 0.12]
- RIEVO → SNR → NS → WB: 0.19 [0.08, 0.37]
- RIEVO → SNR → WB: 0.13 [-0.20, 0.44]

Model $R^2 = 0.47, F (4, 177) = 52.46, p < .001$
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Figure 3. Results of fitting structural model that simultaneously tests situation contact and construal as functions of intrinsic and extrinsic value orientations, Study 4.
Figure 4. Perceived need relevance in vignettes that are relatedness thwarting (negative), neutral, and promoting (positive) as a function of RIEVO, Study 6.
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References


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VALUES AND SITUATION CONSTRUAL FOR PSYCHOLOGICAL NEEDS


Rauthmann, J. F. (2012). You say the party is dull, I say it is lively: A componential approach to how situations are perceived to disentangle perceiver, situation, and
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VITA

Mike Prentice was born on April 24th, 1986 in Casper, Wyoming. In 2008, he graduated cum laude from Knox College in Illinois with a B.A. in psychology (with honors) and philosophy. He completed an M.A. in social and personality psychology at York University in Ontario in 2010, and a Ph.D. in social and personality psychology at the University of Missouri in 2015. He plans to pursue postdoctoral research at the University of Salzburg in fall 2015.