# PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

# Situational Similarity and Personality Predict Behavioral Consistency

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A new method for assessing situations is employed to examine the association between situational similarity, personality, and behavioral consistency across ecologically representative contexts. On 4 occasions across 4 weeks, 202 undergraduate participants (105 women, 97 men) wrote descriptions of a situation they had experienced the previous day. In addition, they rated its psychological features using the recently developed Riverside Situational Q-Sort (RSQ) Version 2.0 (Wagerman & Funder, 2009) and their behavior using the Riverside Behavioral Q-Sort (RBQ) Version 3.0 (Funder, Furr, & Colvin, 2000; Furr, Wagerman, & Funder, 2010). Independent judges also rated the situations using the RSQ, on the basis of the participants' written descriptions. Results indicated (a) participants' ratings of their behavior were impressively consistent across the 4 situations; (b) the 4 situations experienced by a single participant tended to be described more similarly to each other than to situations experienced by different participants; (c) situational similarity, especially from the individual's own point of view, strongly predicted behavioral consistency; and (d) personality characteristics predicted behavioral consistency even after controlling for situational similarity. Relatively consistent persons described themselves as ethically consistent, conservative, calm and relaxed, and low on neuroticism. These results imply that behavioral consistency in daily life stems from multiple sources, including situation selection and the distinctive influence of personality, and further suggest that tools for situational assessment such as the RSQ can have wide utility.

Keywords: behavioral consistency, personality, situations, situation assessment, situational similarity

Situations powerfully influence behavior. This claim is a central tenet of social psychology (Ross & Nisbett, 1991), and thousands of published studies demonstrate that even seemingly minor manipulations of situational variables can have major effects (Richard, Bond, & Stokes-Zoota, 2003). Still, psychology has learned surprisingly little about the behaviorally important properties of situations. Studies of situational variables almost uniformly focus on specific manipulations associated with single behavioral out-

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comes in order to test particular, theoretically based hypotheses (Funder, 2009). The traditional emphasis on hypothesis testing bypasses questions concerning the definition of situations or serious investigation of their important attributes. As a result, after decades of experimental research, psychology still lacks a broad and widely accepted taxonomy of psychologically relevant situational characteristics or a useful tool to assess them.

We are not the first to point this out. As Frederiksen (1972) put it, "the guiding principle in devising these experiments has, naturally enough, usually been the hypothesis or theory being tested. Such work has not led to the construction of a taxonomy of situations" (p. 115). Thirty-six years later, Reis (2008) noted, "The field has yet to develop a clear, consensual definition or taxonomy of what situations are, how they might systematically be compared, and which ones are most influential in what ways" (p. 312).

This is not to say that researchers have completely neglected these issues. A fairly comprehensive—although perhaps already slightly dated—review of efforts to develop situational taxonomies was provided by Ten Berge and De Raad (1999), so we do not provide a full summary here. Instead we highlight important features of some of these earlier efforts as well as describe other taxonomies developed since their review.

First and foremost, a large number of previous attempts to create taxonomies of situations have fallen short in one important regard: They left researchers without a usable tool for quantifying the psychological properties of a broad range of situations or, as Reis (2008) noted, for systematically comparing one situation with another. For example, some studies have exclusively focused on particular types such as anxiety-provoking situations (Endler, Hunt, & Rosenstein, 1962; Krahe, 1986) or academic study situations (Magnusson, 1971). A taxonomy developed by such research is unlikely to widely generalize—a measure developed to assess the properties of anxiety-provoking situations, for example, may not be especially useful for situations that do not fall into this category.

In a more comprehensive effort, Van Heck (1984) used a lexical approach to identify words that could meaningfully fall into the phrase "being confronted with a \_\_\_\_\_ situation." A further series of ratings and factor analyses yielded 10 categories: interpersonal conflict, joint working, intimacy and interpersonal relations, recreation, traveling, rituals, sport, excesses, serving, and trading. In a similar vein, Edwards and Templeton (2005) used a dictionary and a separate database to find 1,039 words that could complete "That situation was \_\_\_\_\_" or "That was a \_\_\_\_\_ situation." These words were reduced through ratings and factor analysis to four factors called positivity, negativity, productivity, and ease of negotiation. A particularly interesting study by Yang, Read, and Miller (2006) applied the lexical approach to Chinese idioms that describe situational contexts (e.g., "too late for regrets" and "catching up from behind"; p. 756) and reduced them through ratings and factor analysis to 20 hierarchically structured clusters all having to do with means of attaining goals. Although suggestions have been offered that efforts like these have the potential to yield methods for measuring properties of situations (Forgas & Van Heck, 1992), to our knowledge no such assessment device has actually been employed in published empirical research.

A different approach to classifying situations (Kelley et al., 2003) used six dimensions derived from interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959) singly and in combination to "define 20 of the most common situations encountered in ordinary social life" (Reis, 2008, p. 317). Using this approach, researchers can examine a given situation in relation to each of the six dichotomous dimensions and determine which are relevant and then classify it into one of the 20 types. This work derives from a theoretical perspective that assumes all situations, or at least the most psychologically important ones (Reis, 2009), are essentially interpersonal. The taxonomy of interpersonal situations included in the resulting "atlas" (Kelley et al., 2003) is wide-ranging and impressive, but like most other efforts in this domain it falls short, at present, of offering a usable assessment device. Moreover, although many behaviors in many contexts relate to interpersonal goals, some do not. An approach that is entirely interpersonal leaves no place for situations associated with solitary behaviors such as working hard on a term paper, meditating, driving to work, or exercising.

# **Behavioral Signatures**

Several recent research programs have turned to behavioral signature approaches, part of the cognitive–affective personality system (CAPS; Mischel & Shoda, 1995), for understanding how persons and situations jointly predict behavior (e.g., Fournier, Moskowitz, & Zuroff, 2008; Shoda, Mischel, & Wright, 1994;

Vansteelandt & Van Mechelen, 2004). Behavioral signatures are defined as relatively stable and discriminative *if* ... *then* ... patterns of behavior produced by the interaction between characteristics of the person and his or her situation (Shoda et al., 1994). Research using this approach has demonstrated reasonable stability of *if* ... *then* ... profiles using prespecified behavioral variables across particular situations of interest (e.g., Shoda et al., 1994; Smith, Shoda, Cumming, & Smoll, 2009).

However, and as others have pointed out (e.g., Fournier et al., 2008; Fournier, Moskowitz, & Zuroff, 2009), the CAPS model does little to specify what it is that makes one situation different from or similar to another. That is, it does not include a description of the "active ingredients" of situations (Mischel & Shoda, 1995, p. 261). One solution was proposed by Fournier and colleagues (2008, 2009). They created a measure of interpersonal situations using an  $11 \times 11$  interpersonal grid based on the interpersonal circumplex model (Leary, 1957) such that the vertical dimension characterizes dominance versus submissiveness and the horizontal dimension characterizes quarrelsomeness versus agreeableness. Fournier and colleagues asked participants to rate each social interaction they experienced over the course of several weeks by marking the behavior of their primary interaction partner on the interpersonal grid. Although this method usefully quantifies interpersonal aspects of situations and has produced a number of interesting findings, it is limited in a similar way as the atlas by Kelley and colleagues (2003), in that it assesses only interpersonal situations and a limited number of psychological variables. It is not clear how this method might be used to assess situations where one is alone. Moreover, a number of other potentially important psychological properties of situations are not captured—properties such as, Is the context potentially anxiety inducing? Does the context include aesthetic stimuli? Are minor details of a task important? To capture properties such as these, a more comprehensive measure is required.

In another approach stemming from the CAPS model, Van Mechelen (2009; Vansteelandt & Van Mechelen, 2004) employed multidimensional scaling to identify types of persons, or personbehavior profiles, on the basis of behavioral responses to hypothetical situations. In an illustrative application, Vansteelandt and Van Mechelen (2004, p. 381) demonstrated three meaningful person profiles for 10 "anger" responses (e.g., "slams door," "says nasty things," "loses temper") in three hypothetical frustrationinducing situations (e.g., "a fellow student lost your 15 page exam paper and no other copy exists"). Although this method appears promising, it is not yet clear how adding more situations will impact the number of profiles retained. For example, would adding a fourth situation yield a fourth (or fifth?) person-behavior profile? In addition, this method is limited in that it focuses on only one potential dimension at a time. The three hypothetical situations used by Vansteelandt and Van Mechelen were selected on the basis of pretests of the degree to which each provoked frustration. Other psychologically relevant characteristics remained unmeasured. However, in real-world situations it seems rarely the case that a single property solely determines an individual's behavior. For instance, the behavior of an individual in a situation that "entails frustration or adversity" might largely depend on whether

"members of the opposite sex are present" or "a job needs to be done." 1

Thus, despite some recent signs of progress, personality and social psychology still lacks a general method for assessing the psychologically important characteristics of situations. This state of affairs points to an odd imbalance. For nearly 100 years (cf. Woodworth, 1917) personality psychologists have recognized the importance of being able to quantify differences between individuals, and a large research literature offers literally thousands of tools for personality assessment. These assessment tools, in turn, can be used to predict a wide range of important behavioral outcomes (Ozer & Benet-Martínez, 2006; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007). The assessment of situations lags far behind. The challenge for research on situations, therefore, goes beyond identifying dimensions or types to developing a useful tool for situational assessment.

# The Riverside Situational Q-Sort

The present article introduces a new instrument for assessing psychological properties of situations: the Riverside Situational Q-Sort (RSQ) Version 2.0 (Wagerman & Funder, 2009). A description of its development was provided by Wagerman and Funder (2009), so we highlight only the important differences from previous measures here. Unlike in some previous attempts, in our study the principal aim of using the RSQ was not to identify the essential set of characteristics of situations. We also did not restrict our conception of a situation to a particular theoretical perspective (e.g., Fournier et al., 2008; Reis, 2008). The guiding principles in the development of the RSQ were that (a) the instrument should be applicable to as wide a range of situations as possible, (b) the instrument should be able to quantify the degree of similarity or dissimilarity between any two situations across a wide range of psychological properties, and (c) the instrument should be related to important outcomes relevant to personality (e.g., behaviors, emotions).

The item content for the RSO was originally inspired by the long-used and wide-ranging California Adult Q-Sort (CAQ) for the description of personality developed more than 50 years ago by Jack Block and his colleagues (e.g., Block, 1978; Block & Kremen, 1996; Letzring, Block & Funder, 2005). For each of the personality descriptors in the CAQ, a description was written of an aspect of situational context that might tend to evoke the relevant behavioral tendency. For example, the CAQ item referring to characteristic talkativeness yielded the RSQ item "Talking is permitted, invited, or conventionally expected." CAQ items pertaining to tendencies to experience or not deal well with anxiety yielded the RSQ item "Context is potentially anxiety-inducing." Because of its comprehensive coverage and demonstrated utility for personality assessment, the CAQ provides a useful springboard for the development of situational descriptors. As will be considered in the Discussion section, other foundations for item content are possible and deserve exploration in future research.

The full set for the RSQ (Version 2.0), used in the present study, includes 81 items. The Q-sort format requires raters to place each into a forced, quasinormal distribution (Block, 1978). The format has some distinct advantages over conventional Likert-style response scales in that it forces raters to choose only a small subset of the items as highly characteristic or uncharacteristic of the target

of assessment, with many more being placed in the middle as relatively irrelevant (e.g., Block, 1978; Funder & Colvin, 1991). This method prevents the manifestation of some rater response sets (e.g., acquiescence, extremity) and forces a rater to carefully consider each item, because each one is, in effect, compared with every other. In the present study, the 81 items were sorted into nine categories ranging from 1 (extremely uncharacteristic) to 9 (extremely characteristic) with the assigned distribution, respectively, 3, 6, 10, 14, 15, 14, 10, 6, and 3.

The current article aims to put the specific content and method of the RSQ to a pragmatic test, by using it in research that addresses the following psychologically substantive questions: (a) To what degree do people report behaving consistently across situations? (b) To what degree do people find themselves in similar situations? (c) To what degree does personality and similarity between situations predict behavioral consistency?

# **Behavioral Consistency**

The answer to whether people behave consistently across situation depends in part on the definition of *consistency*, and several possibilities have been offered (Fleeson & Noftle, 2008; Furr, 2009; Lord, 1982; Ozer, 1986).<sup>2</sup> For instance, *absolute consistency* means always displaying the same behavior across time and situations. This type of consistency is not a fruitful target for research because there is scant evidence that absolute consistency exists (Fleeson, 2001) outside of cases of severe psychopathology (e.g., catatonic schizophrenia) or coma.

A more reasonable expectation is rank-order consistency, which personality psychologists often focus on because it reflects the stability of individual differences and more generally points to the coherence of personality. Rank-order consistency requires that an individual's enactment of behaviors remains at the same level relative to others although absolute levels may change. For instance, Funder and Colvin (1991) demonstrated that behavior can manifest high rank-order consistency from one laboratory context to another—people who exhibited relatively expressive nonverbal behavior in a getting-acquainted conversation were also relatively expressive in a debate context (r = .53)—and that this kind of consistency is not incompatible with mean-level behavior change across the contexts. Despite their high rank order consistency, participants were, on average, significantly more nonverbally expressive in the debate than in the getting-acquainted conversation. Oishi (2004) obtained similar findings in a cross-cultural study showing that rank-order consistencies of positive mood among both American and Japanese participants were fairly high across a variety of contexts even though strong and predictable patterns of mean differences were found across contexts and cultural groups.

However, the degree to which *individuals* behave consistently across situations does not concern rank-order consistency, because this type of consistency does not involve comparisons between people. Instead, the subject matter is a third kind of consistency,

<sup>&</sup>lt;sup>1</sup> The characteristics mentioned here in quotes, as well as those questioned near the end of the preceding paragraph, are included in the more comprehensive measure of situational properties introduced in the next section of the article.

<sup>&</sup>lt;sup>2</sup> For more thorough discussions of the varieties of behavioral consistency see Fleeson and Noftle (2008) and Ozer (1986).

within-person behavioral consistency, also referred to as personcentered, or ipsative, consistency. Ipsative consistency is defined as "the enactment of behavior maintaining the same relative position compared to other enactments of behavior" (Fleeson & Noftle, 2008, p. 1362). Ipsative consistency has rarely been measured by personality psychologists despite its fundamental importance (Fournier et al., 2008), most likely because it requires the simultaneous measurement of at least several and preferably many behaviors in each situation of interest (for an exception, see Fleeson, 2001, who demonstrated high ipsative consistency of reports of behaviors relevant to the Big Five personality traits over time and context). Ipsative consistency is independent from rank-order consistency, in principle, because its measurement is based on comparisons of behavior across situations, within individuals, rather than comparisons between individuals, within situations.<sup>3</sup> In other words, the assessment of one individual's level of ipsative consistency does not depend upon what anybody else does (Lamiell, 1981).

The concept of ipsative consistency highlights the importance of the situation. To some degree, every individual changes what he or she does while moving from one situation to the next, and it is straightforward to expect that ipsative consistency will be lower to the degree that the two situations are psychologically different. Although the relationship between situational similarity and behavioral consistency may seem intuitive, empirical demonstrations have included just a few laboratory experiments (e.g., Borkenau, Mauer, Riemann, Spinath, & Angleitner, 2004; Furr & Funder, 2004) and are even more rare in ecologically representative (i.e., real world) situations (e.g., Fournier et al., 2008; Krahe, 1986). A central purpose of the present study is to examine the relationship between situational similarity and ipsative behavioral consistency—hereafter referred to simply as behavioral consistency—in real-world contexts.

It is important to extend research on cross-situational consistency into participants' contexts of daily life because experimental methods are particularly limited in their ability to address this topic. Most social psychology experiments are—by design—characterized by situational pressures that limit an individual's ability to display a wide range of behaviors. Indeed, experimental manipulations are typically intended (and pretested) to determine participants' behavior, not to allow it free rein. Also typical of experimental studies is that only a few behavioral dependent variables are observed and recorded—in fact, more often than not, just one. One distinctive—and necessary—aspect of the present research is that it includes measurements of a wide range of behaviors. Finally, few experimental studies observe participants in more than one situation—the sine qua non for the assessment of consistency. The present study includes four.

# **Situational Similarity**

"A minimalist implication of the idea that behavior is to any degree a function of the situation, is that behavior should be more consistent across two situations to the degree that they are similar" (Furr & Funder, 2004, p. 422, emphasis in original). Although this idea might seem intuitively obvious, as was mentioned earlier, it has been suggested elsewhere that "links between situational similarity and consistent individual differences across situations" have been "often expected but rarely attained" (Shoda, Mischel, &

Wright, 1993, p. 1023). For example, Lord (1982) found that consensual ratings of situational similarity were not able to predict cross-situational consistency in conscientious behavior.

Findings such as these motivated the study by Shoda and colleagues (1993), which found that behavioral consistency could be predicted, in part, from the degree to which the different situations demanded similar kinds of competencies. They were also the impetus for two studies reported by Furr and Funder (2004).<sup>4</sup> In Study 1, participants experienced two situations that were objectively identical—in both, they sat on a couch with an opposite sex stranger for 5 min. Furr and Funder demonstrated that the degree to which participants subjectively viewed these situations as similar or different predicted their degree of behavioral consistency across them (perceptions of greater dissimilarity were associated with less cross-situational consistency). In Study 2, Furr and Funder assessed the objective similarity of situations in terms of two specific aspects: the identity of the interaction partner and the nature of the experimental task. They found that behavior was more consistent across objectively similar situations (for details see Furr & Funder, 2004). The effect of both subjective and objective situational similarity on behavioral consistency was so powerful that Furr and Funder stated it "nearly qualifies as a law of human behavior" (p. 443). However, these findings represent only a first step. Study 2 defined objective situational similarity in terms of only two elements, and both studies examined behavior within experimentally contrived situations, which means the generality of the findings to ecologically representative contextssuch as the participants' ordinary, daily activities—remains to be established.

More generally, a drawback to assigning participants to experimental situations—standard practice in much research, including that of Furr and Funder (2004)—is that it bypasses situation selection effects (Ickes, Snyder, & Garcia, 1997). For instance, consider a dynamic interactional model that views persons, situations, and behavior as reciprocal causes of one another (Bandura, 1978; Eaton & Funder, 2005). In this view, people in their everyday lives ought to behave even more consistently than in contrived experiments because they will tend to find themselves repeatedly in the same or similar situations. To investigate this and related possibilities, in the present study we asked each participant to describe four situations that he or she had recently experienced in daily life. In addition, we indexed situational similarity not only from participants' own ratings but also from independent raters, who provided a more detached viewpoint.

### **Personality**

Personality researchers often use trait ratings to predict particular behaviors or outcomes of interest. In addition, the rank-order consistency of behavior across multiple time points and contexts may be assessed and, if found, viewed as evidence for the cross-contextual influence of personality. However, it is possible that

<sup>&</sup>lt;sup>3</sup> The conceptual independence of ipsative and rank-order consistency does not necessarily mean the two are empirically unrelated. It just means there is no necessary, mathematically compelled relation between the two.

<sup>&</sup>lt;sup>4</sup> Furr and Funder (2004) used the term *person-centered* rather than *ipsative* in their article, and we consider the terms interchangeable in this context.

some people are more consistent than others. For example, consider one person who arrives at work each morning in a cheerful and sociable mood and engages her coworkers in conversation, compared with another person who sometimes arrives in an equally positive frame of mind but who occasionally, and from her coworkers' point of view unpredictably, begins the day with expressions of hostility and unfriendliness. The first person's behavior is more consistent than the second's, and coworkers may say, about the second person, "I wonder which Mary will show up this morning?"

Observations like these raise two questions. First, are there important individual differences in the degree to which people respond consistently to situations over time and across contexts (Bem & Allen, 1974)? If the answer is yes, then a second question becomes, what underlying personality traits are associated with individual differences in consistency?

Studies measuring consistency of particular behaviors across situations have not been able to clearly distinguish and replicate personality characteristics of consistent and inconsistent individuals (Bem & Allen, 1974; Chaplin, 1991). When examining a more broad range of behaviors, however, previous theoretical reviews and empirical evidence have suggested that in Western societies, consistent individuals tend to display positive characteristics related to good mental health (Allport, 1955; Block, 1961; Donahue, Robins, Robert, & John, 1993).5 To our knowledge, the only examination of such possible relationships between ipsative behavioral consistency and personality is found in unpublished data included in a dissertation by Furr (2000).<sup>6</sup> In the two laboratory experiments reported subsequently by Furr and Funder (2004), consistency in directly observed behavior from one situation to another was related to social competence, ego resiliency, and psychological adjustment. However, these associations were identified in experimental interaction contexts that were not of the participants' choosing. The present study examines the question of who is more consistent in the context of participants' daily life.

### **Hypotheses**

In order to clarify the relations between situations, persons, and behaviors, in the present study we test four hypotheses:

- 1. People will report consistent patterns of behavior across four situations sampled from their daily lives. Behavioral consistency was the center of controversy during the person–situation debate (Kenrick & Funder, 1988), and a wide literature developed on this topic. Some of the most convincing evidence came from the work of (a) Epstein (1979), who showed that aggregated (averaged) behaviors across multiple contexts are highly predictable by personality traits; (b) Funder and Colvin (1991), who demonstrated that behavioral consistency can be fairly high across three laboratory settings despite mean-level changes in behavior across the settings; (c) Fleeson (2001), who demonstrated that mean reports of behaviors relevant to the Big Five personality traits are stable over time and context; and (d) Borkenau and colleagues (2004), who demonstrated consistent behavior across a range of experimental tasks.
- 2. The four situations sampled from each participant will be relatively similar. One explanation for behavioral consistency in everyday life is that people can to some extent choose the situations they experience, by seeking out some and avoiding others

(Ickes et al., 1997). For example, it has been proposed that people tend to seek out situations that maintain their self-conceptions (Swann, 1987). People also affect or even create the situations they experience. A highly disagreeable person, for example, might repeatedly find himself or herself in situations fraught with hostility. Therefore, the second hypothesis is that the four situations experienced by a single participant will tend to be described more similarly to each other than to situations experienced by different participants. Similarity will be examined using both subjective accounts of the psychological properties of situations as well as more objective accounts provided by independent raters.

- 3. Situational similarity will strongly predict behavioral consistency. If situations are indeed important determinants of behavior, there should be an association between situational similarity and behavioral consistency: Self-reported behavior should be more consistent across situations to the degree that the situations are similar. Support for this hypothesis would replicate the situational similarity effect found in the laboratory by Furr and Funder (2004) in a more ecologically representative setting. In addition, the current study investigates the degree to which assessments of similarity based on subjective and relatively objective descriptions of situations provide independent routes toward predicting behavioral consistency.
- 4. Personality will be associated with behavioral consistency over and above the effect of situational similarity. One person's behavior may tend to be more consistent across situations than another's (Bem & Allen, 1974), even when both are faced with equally similar (or dissimilar) situations. If this hypothesis is supported, a second question will arise: What personality characteristics are associated with behavioral consistency? Utilizing an ipsative approach to behavioral consistency, in the current study we attempt to replicate findings by Furr (2000) that consistent people tend to be socially competent and psychologically well adjusted. The multiethnic nature of our participant pool allows a further investigation as to whether this relationship is attenuated among participants of Asian ethnicity, as some past research might suggest (e.g., Church, 2009; Suh, 2002).

#### Method

# **Participants**

Two hundred twenty undergraduate participants from the University of California, Riverside, were solicited via flyers on campus and through an online university psychology participant pool. Data collection began in fall 2007 and concluded in spring 2009. Because this study focuses on behavioral consistency over multiple time points, only participants who completed all sessions were retained for analyses. As a result, 14 participants were dropped because they attended only Session 1 (n = 12) or Sessions 1 and 2 (n = 2). In addition, three participants completed the study twice; data from their second participation were dropped. Finally,

<sup>&</sup>lt;sup>5</sup> Some theory and research has suggested that within Eastern, collectivist cultures, consistency is not associated with psychological adjustment (e.g., Church, 2009; Suh, 2002; see also Markus & Kitayama, 1998).

<sup>&</sup>lt;sup>6</sup> These laboratory experiments were described by Furr and Funder (2004), but the specific results described here appeared only in Furr (2000).

one participant was dropped for suspicion of random reporting. This left a final sample of 202 (105 female, 97 male) participants, on whose data the following analyses are based. Because of missing data on some measures, the number of participants for particular analyses varies slightly. The ethnic breakdown of the final sample was 37% Asian, 27% Hispanic/Latino, 13% Caucasian, 13% Other, 8.5% African American, and 1.5% no response. The participants were compensated \$12.50 per hour, with a maximum payment of \$75.00 if they completed all sessions.

### **Procedure**

Participants came to the laboratory for a total of five visits over the course of 5 weeks. The visits were at least 48 hr apart. On the first visit, participants received information about the study and completed demographic questionnaires and several personality measures (see the Measures section). On the subsequent four visits, participants were asked to describe a situation they had been in the day before at one of four prespecified times (10 a.m., 2 p.m., 5 p.m., or 9 p.m.) by writing down what they were doing on a 3  $\times$ 5 index card.<sup>7</sup> Participants were instructed to specify only one situation. For example, if the participant said that at 2 p.m. she was playing softball and then going to dinner with friends, we asked the participant to revise the data to specify only one of these. In addition, participants were instructed that if they were sleeping at the indicated time, they should write down what they were doing right before they went to sleep or right after they woke up. Participants were next asked to describe the psychological characteristics of that situation with the RSQ (Wagerman & Funder, 2009) using a computer-based Q-sorter program developed in our lab.8 Participants were then asked to describe how they acted in that situation with the Riverside Behavioral Q-Sort (RBQ) Version 3.0 (Funder et al., 2000; Furr et al., 2010), also using the computerbased Q-sorter program.

### Measures

**Big Five Inventory.** The Big Five Inventory (BFI; John & Srivastava, 1999) consists of 44 items that assess the global personality traits of Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness. Each item is rated on a 5-point Likert scale ranging from 1 (*disagree strongly*) to 5 (*agree strongly*) using a computerized testing format. The alpha reliabilities of the five composites from the 202-person sample were as follows: Agreeableness = .78, Extraversion = .85, Conscientiousness = .82, Neuroticism = .80, and Openness = .73.

**CAQ.** The CAQ (Block, 1978; as modified for use by non-professionals by Bem & Funder, 1978) contains 100 diverse personality characteristics (e.g., "Is genuinely dependable and responsible"; "Has a wide range of interests"). Using the Q-sorting computer program, each participant assessed his or her own personality using the modified CAQ by placing each of the items into one of nine categories, which ranged from 1 (*extremely uncharacteristic*) to 9 (*extremely characteristic*), forming a forced-choice, quasinormal distribution.

**RSQ** (Version 2.0). The RSQ (Version 2.0; Wagerman & Funder, 2009) comprises 81 diverse characteristics of situations (e.g., "Talking is permitted, invited, or conventionally expected"; "Context is potentially anxiety-inducing"). During Sessions 2–5 at

the lab, each participant assessed the situation he or she reported being in at a particular time the day before by placing each item into one of the nine categories, which ranged from 1 (*extremely uncharacteristic*) to 9 (*extremely characteristic*) according to a forced-choice, quasinormal distribution, using the Q-sorting computer program. As was mentioned previously, the number of items placed in each category was 3, 6, 10, 14, 15, 14, 10, 6, and 3 for categories 1–9, respectively. Thus, as is typical of the Q-sort method, participants are forced to decide which few items are the most and least characteristic of the situation whereas the majority of less relevant, or even irrelevant, items are left to the middle categories.

RBQ (Version 3.0). The RBQ (Version 3.0; Funder et al., 2000; Furr et al., 2010), is a 67-item assessment tool designed to describe the range of a person's behavior. Items include "Appears relaxed and comfortable"; "Is expressive in face, voice and gestures"; and "Tries to control the situation." During each return visit to the lab, and after completing the RSQ, participants assessed their own behavior in the situation they reported being in at a particular time the previous day. This was done using the Q-sorting computer program by placing each of the 67 items into one of nine categories, which ranged from 1 (extremely uncharacteristic) to 9 (extremely characteristic), forming a forced-choice, quasinormal distribution. Although data derived from direct observations of behavior are generally preferable (Furr, 2009), the impracticality of gathering multiple observer reports of 67 behaviors from multiple time points in a participant's daily life necessitated the use of self-reports. This issue is addressed further in the Discussion

**Independent situational ratings.** Although in this study it was not possible to view the participants' situations directly, we sought independent ratings that could help provide a window into the ways that others might view situations differently from how the participants themselves did. As previously explained, during Sessions 2–5 participants began by describing where they were at a specified time the previous day on a  $3 \times 5$  card. Of course, these descriptions are, in a sense, already filtered through the participants' point of view. However, nearly all are in fact quite straightforward descriptions of objective aspects of situations (e.g., "I was just finishing my midterm for Psych 1," "Making dinner for me and my boyfriend"; see Table 1 for more examples) that still leave room for differences in subjective response.

Four research assistants, from a total pool of 22, independently read and rated each situation using the RSQ. As a means of quality control (and similar to practice with the RBQ; Funder et al., 2000), the four ratings for each situation were examined for profile agreement and retained if the average agreement exceeded r = .23,

<sup>&</sup>lt;sup>7</sup> Because each participant completed four visits and four times were used, the Time × Visit effects were completely confounded within participants. To counteract this, a modified Latin-square design was used such that approximately one fourth of the participants completed the study using each of the following time sequences: 10 a.m.−2 p.m.−5 p.m.−9 p.m.; 2 p.m.−5 p.m.−9 p.m.−10 a.m.; 5 p.m.−9 p.m.−10 a.m.−2 p.m.; 9 p.m.−10 a.m.−2 p.m.−5 p.m.

<sup>&</sup>lt;sup>8</sup> Go to http://rap.ucr.edu/qsorter/ for more information about this program and a free downloadable copy. This website also includes complete lists of the CAQ, RSQ, and RBQ items used in the present study.

which is an empirical estimate of the profile agreement between two randomly paired situations. For approximately 50 situations out of the 810 total, a rating with low agreement was dropped and an additional rating was completed. The four ratings were then averaged to form a composite, independent rating of the psychological properties of each situation. The average profile agreement among raters of the same situation is r = .49 (SD = .08), yielding an average alpha for the rater composites of .79 (SD = .06).

# **Quantifying Behavioral Consistency and Situational Similarity**

The previously described methods yielded, for each participant, four descriptions of situations using their own ratings with the RSQ, four self-reports of behavior using the RBQ, and four independent ratings of situations using the RSQ. Thus, six similarity (or consistency) coefficients from each group of descriptions can be computed for each participant (i.e., Situation 1 paired with Situation 2; 1 with 3; 1 with 4; 2 with 3; 2 with 4; and 3 with 4). For example, for Participant 001 the behavioral consistency between his or her first and second situations is indexed by correlating his or her scores on the 67 behaviors measured in the first situation with his or her scores on the same 67 behaviors measured in the second situation. The six profile correlations—sometimes called person-centered or within-subject correlations—were calculated for each participant with full data, one for each possible pairing of the four situations. These six correlations were calculated for each participant using his or her own RSQ ratings (as indices of situational similarity), his or her RBQ ratings (as indices of behavioral consistency), and the independent RSQ ratings (as a second set of indices of situational similarity). The average of the six RSQ profile correlations from self-ratings of the RSQ, the six profile correlations from the self-ratings of the RBQ, and the six profile correlations from the independently rated RSQs were computed for each participant, yielding an index for average situational similarity based on participant descriptions, an index for average behavioral consistency, and an index for average situational similarity based on independent ratings.9

It is important to make clear that the first two of these indices are not simply self-reports of how similar the participants thought the situations or their behaviors were across the four contexts. Instead, the participants provided separate descriptions of each of the four situations they experienced and their behavior in them—one situation each day, several days apart over the course of four weeks. Situational and behavioral similarity scores were computed from these descriptions. The similarity among the independent ratings of the participants' situations was similarly derived.

### Results

# **Situation Content**

To give the reader a sense for the content of the situations that participants reported, we present in Table 1 a list of 10 situations randomly chosen out of the total pool of 810. For each situation, Table 1 also includes the three RSQ items that the participant rated as most and least characteristic.<sup>10</sup>

To identify meaningful clusters, or types of situations, we conducted an exploratory inverse principal components analysis,

wherein the 810 situations served as "variables" and the 81 items served as "participants," on the composite independent ratings of the situations. Using a direct obliman rotation with a step-up approach (Rosenthal & Rosnow, 2008) we examined solutions for one to eight possible rotated components (first eight eigenvalues = 379.53, 118.95, 44.71, 29.85, 19.59, 16.82, 16.06, 12.04). We examined the component loadings and the scoring coefficients for each of the rotated solutions for clarity and ultimately settled on a seven-cluster solution accounting for 77% of the variance. We provisionally labeled these clusters I-Social Situations (e.g., "eating lunch with 2 friends on campus"; "hanging out with some friends"), II-School Work in Class With Others (e.g., "sitting in Perception class at the UV with friends/classmates"; "I was in class"), III-School Work at Home or Alone (e.g., "studying in my dormroom by myself"; "I was typing up an English paper that was due"), IV-Recreating (e.g., "I was at my dorm with my friend Sean, playing video games"; "I was playing tennis at UCR rec center with three of my friends"), V-Getting Ready for Something (e.g., "I went to the bathroom and took a shower and brushed my teeth"; "I was taking a shower and getting ready"), VI-Work (e.g., "at work for Dining Services in the Commons"; "I was at work"), and VII-Unpleasant Situations (e.g., "I was looking for my cell phone, thinking I had lost it"; "I was at the UCR health center because I had a severe flu").

As a means for estimating the number of situations in each of these clusters, we considered each situation a member of the cluster in which it had the highest principal component loading. Approximately 36% of situations loaded most highly on the Social Situations cluster, 19% on the School Work in Class With Others cluster, 14% on the School Work at Home or Alone cluster, 13% on the Recreating cluster, 11% on the Getting Ready for Something cluster, 4% on the Work cluster, and 3% on the Unpleasant Situations cluster. This exploratory analysis is meant to illustrate only the diversity of the situations that participants reported and is not considered further in the present article.

### **Hypotheses**

To test the first hypothesis—that people will report consistent patterns of behavior across four situations sampled from their daily lives—we had to establish a baseline level of behavioral consistency. A certain amount of apparent consistency can be expected simply because some behaviors included in the RBQ are rarely displayed even across all situations and people (e.g., "tries to undermine, sabotage or obstruct") whereas others are quite common (e.g., "appears relaxed and comfortable"), which artificially inflates the six coefficients used to create the average consistency index. To estimate this baseline, we computed the RBQ profile correlations across all possible pairs of profiles in the data set (across and within subjects) and then averaged them. This technique resembles the correction for normativeness in profile similarity described by Furr (2008). The baseline level of behavioral

 $<sup>^9</sup>$  All analyses were performed using r-to-Z transformations where appropriate; however, we report the back-transformed rs.

<sup>&</sup>lt;sup>10</sup> One may get an even better feel for how the RSQ describes situations by going to http://rap.ucr.edu/qsorter/ and (a) downloading the Q-sorter program, the RSQ deck, and the instructions file and then (b) thinking of a recently experienced situation and trying to sort it oneself.

Table 1
Randomly Sampled Situations and Items Rated Most and Least Characteristic

Situation	Extremely Characteristic (9)	Extremely Uncharacteristic (1)	
"Playing games at a friend's apartment"	03-Talking permitted, invited, or expected	08–Uncertain/complex	
, , , ,	09–Potentially enjoyable	78–Others occupy various social roles	
	72–Raises power issues	79-Participant is pressured to conform	
"Yesterday at 9pm I was at home with my friends"	24–Involves competition	08–Uncertain/complex	
	69–Simple/clear-cut	33-Potential undermining/sabotage	
	70–Allows expression of charm	06-Evokes lifestyle/political values	
"I was taking a midterm"	07–Can demonstrate intellectual capacity	10-Another is under threat	
	62–Allows expression of ambition	14–Playful	
	76–Can be emotionally arousing	32-Evokes warmth/compassion	
"Playing softball at my local park with my sister	02–Counted on to do something	06–Evokes lifestyle/political values	
and her friends"	03-Talking permitted, invited, or expected	07-Can demonstrate intellectual capacity	
	09–Potentially enjoyable	10–Another is under threat	
"I went to my Entomology discussion."	47–Includes intellectual stimuli	10-Another is under threat	
	69–Simple/clear-cut	16-One is unhappy/suffering	
	77–Allows for verbal fluency	66–Can arouse feelings of self-pity	
"I just finished class and was walking back to the	03–Talking permitted, invited, or expected	10–Another is under threat	
dorm with Diana"	29-Positive or negative impression possible	33-Potential undermining/sabotage	
	45–Close relationships present or could develop	37–Potentially threatening	
"I was watching TV"	09–Potentially enjoyable	10-Another is under threat	
	51–Is or potentially is humorous	11-Is being criticized	
	67–Opposite sex is present	42-Could entail stress or trauma	
"Making dinner for me and my boyfriend"	23–A job needs to be done	38-Raises moral/ethical concerns	
, ,	49–Allows for immediate gratification	64-Allows for sexual construal of stimuli	
	53–Includes sensuous stimuli	66-Can arouse feelings of self-pity	
"Studying English Class by myself in my dorm	07-Can demonstrate intellectual capacity	10–Another is under threat	
room without my computer on, in the A&I	79–Participant is pressured to conform	28-Physical attractiveness salient	
residence hall"	80–Success requires cooperation	70-Allows expression of charm	
"I was just finishing my midterm for Psych 1"	07–Can demonstrate intellectual capacity	03-Talking permitted, invited, or expected	
	47–Includes intellectual stimuli	14–Playful	
	69-Simple/clear-cut	28–Physical attractiveness salient	

*Note.* Situations are direct quotes from the participants and were chosen randomly from the total sample of 810 situations. Content of the items from the Riverside Situational Q-Sort (RSQ) is abbreviated. RSQ item numbers are listed in front of the abbreviated content.

consistency across all possible behavioral profiles was r=.23, (SD=.24). The average behavioral consistency within subjects was r=.41 (SD=.23), and a one-sample t test, with the null hypothesis  $\rho=.23$ , confirmed that within-subject behavioral consistency was greater than the baseline, t(200)=12.14,  $p<2.2\times10^{-16}$ , r=.65. Thus, this hypothesis is supported.

A similar analytic approach was used to test the second hypothesis, that the four situations sampled from each participant would be similar. First, a baseline-level situational similarity coefficient was computed by correlating all possible pairs of situation profiles (across and within subjects); then a one-sample t test was conducted to compare the average within-subject situational similarity to the baseline level. The average within-subject similarity among participant-provided descriptions of situations (r = .33, SD = .16) was greater than the baseline (r = .20, SD = .18), t(201) = 12.12, $p < 2.2 \times 10^{-16}$ , r = .65. In addition, this finding was replicated using the situational similarity index derived from the independent descriptions. Once again, a baseline-level situational similarity coefficient was computed by correlating all possible pairs of independent situation profiles (across and within subjects), and this was used as the null hypothesis for a one-sample t test. The average within-subject situational similarity derived from independent descriptions (r = .52, SD = .19) was greater than the baseline  $(r = .45, SD = .22), t(202) = 6.73, p = 1.695 \times 10^{-10}, r = .43.$ Thus, the second hypothesis is supported by indices of situational similarity derived both from the participants' own descriptions and by independent ratings.

To test the third hypothesis—that situational similarity will strongly predict behavioral consistency—we conducted two analyses, one between subjects and the other within subjects. First, the correlation between the behavioral consistency index and the situational similarity index based on the participants' descriptions was computed. As anticipated, this correlation was strong and positive (r = .66), 95% CI [.58, .74], t(199) = 12.56,  $p < 2.2 \times 10^{-2}$ 10<sup>-16</sup>. The scatter plot with regression line is displayed in Figure 1. People who experienced more similar situations, on average, also reported more behavioral consistency, on average. This finding was robust across gender (women: r = .62, men: r = .69) and ethnicity (rs = .84, .72, .51, .64, and .68 for participants indicating African American, Asian, Caucasian, Hispanic, and Other ethnicities, respectively). This result was replicated using the situational similarity index derived from independent descriptions as well  $(r = .33), [.20, .45], t(200) = 4.92, p = 1.77 \times 10^{-6}.$ 

This hypothesis was also tested in a within-subjects fashion. Recall that each participant had six behavioral consistency correlations and six situational similarity correlations based on the participant's own descriptions of the situations (one for each pair of the four situations). If the hypothesis were correct, one would expect these two sets of six correlations to covary in a strong and positive fashion within each participant. That is, if Participant 001

described Situations 1 and 2 in a similar fashion, his or her two behavioral reports ought to be similar as well. However, if the descriptions were highly dissimilar, then his or her behavioral reports would be expected to be dissimilar. Thus, for each participant a within-subject correlation across the six situational similarity and behavioral consistency pairs was computed, representing the degree to which the third hypothesis was true for each participant.11 As anticipated, the average within-subject correlation was high (r = .63, SD = .60) and was significantly greater than  $\rho = 0$ ,  $t(200) = 15.06, p < 2.2 \times 10^{-16}$ . The histogram of these withinsubject correlations is displayed in Figure 2. As can be seen, over 87% of participants showed a positive relationship between the similarity of their situational descriptions and the consistency of their reports of behavior across the same situations, although a notable minority of participants (just under 13%) showed a negative relationship, with one participant displaying a surprising r =-.88. To summarize, both the between-subjects—from self-ratings and independent ratings—and within-subjects analyses provide strong support for the third hypothesis.

We examined the basis of these findings with some follow-up analyses. With two different indices of situational similarity in hand (based on the participants' and independent raters' descriptions), both of which predict behavioral consistency, one might wonder whether these two indices are measuring anything differently. That is, what is the agreement between these two measures? Further, given that both of these indices predict behavioral consistency, one might also wonder whether each uniquely contributes to the prediction.

To answer the first question, we computed the correlation between the self-reported situational similarity index based on participants' descriptions and the situational similarity index based on the independent descriptions. This correlation was strong and positive (r = .42), t(201) = 6.52,  $p = 5.526 \times 10^{-10}$ , suggesting there is agreement

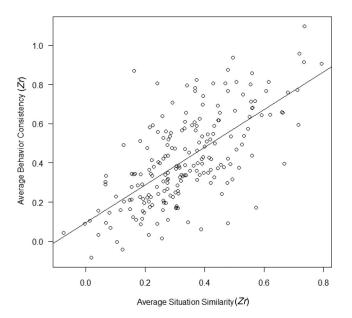


Figure 1. Scatter plot and regression line predicting average behavioral consistency from average situational similarity. Both variables are shown in the scale of Fisher's Z-transformed rs (Zr).

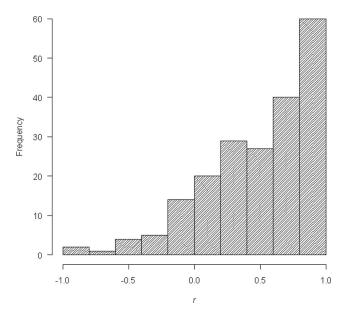


Figure 2. Distribution of within-subject correlations between situational similarity and behavioral consistency.

among the participants and the independent raters as to which situations were on average most similar. However, a multiple regression predicting the behavioral consistency index from the two different indices of situational similarity indicates that the relationship between situational similarity as indexed by the independent descriptions and behavioral consistency is nearly fully mediated by the index of situational similarity based on the participants' descriptions. As shown in Figure 3, although the bivariate relationship between situational similarity derived from independent descriptions and behavioral consistency is r = .33, when the index of situational similarity derived from the participants' own descriptions is added to the model as a mediator, the relationship is reduced to near zero ( $\beta = .06$ ). This analysis suggests that the relationship between situational similarity and behavioral consistency is almost entirely accounted for by the degree to which the participants themselves see the situations as similar. Some possible explanations are considered in the Discussion section.

To test the hypothesis that personality is associated with behavioral consistency over and above the effect of situational similarity, we correlated self-reported CAQ personality characteristics with the behavioral consistency index described earlier after controlling for both indices of situational similarity (based on the participants' and the independent raters' situational descriptions). These results are displayed in Table 2. As can be seen, for the full sample, 11 of the 100 CAQ personality items were statistically significantly correlated with behavioral consistency (at p < .05). This number is more than double the number of significant correlates nominally expected by chance, which would be 5. But this expectation is at

<sup>11</sup> This within-subject analysis was conducted using only the participant-reported RSQ ratings because the procedure for gathering independent ratings included a number of instances of the same rater assessing situations from the same participant. Therefore, an analysis using independently rated RSQ descriptions would confound individual rater biases with similarity effects in an indiscernible manner.

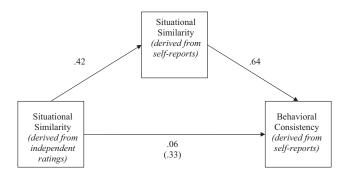


Figure 3. Mediational model showing that the relationship between situational similarity derived from independent raters' judgments of situational characteristics and behavioral consistency is nearly fully mediated by situational similarity derived from the participants' judgments.

best imprecise and is based on an assumption of multivariate independence that is probably incorrect. Recently, Sherman and Funder (2009) developed a randomization test for estimating the probability of obtaining a given number of significant correlates by chance. In the present context, the probability of obtaining 11 statistically significant correlates is p = .035. According to a further randomization procedure recommended by Sherman and Funder (2009), the average absolute r between the 100 personality traits of the CAQ and behavioral consistency after controlling for both indices of situational similarity was also statistically significant (r = .07, p = .0147).

Interestingly enough, though perhaps unsurprising in retrospect, people who behaved most consistently viewed themselves as "favoring conservative values," "behaving in an ethically consistent manner," "genuinely dependable," and "behaving in a gender consistent manner." Further, people who behaved most consistently across the four situations on average indicated that they do not have "a brittle ego-defense system," "feel a lack of personal meaning in life," or have "fluctuating moods" (item content is abbreviated). Although Table 2 suggests some gender differences in the personality correlates of behavioral consistency (e.g., being interested in members of the opposite sex is a stronger correlate of behavioral consistency among men than among women), the vector correlation between the two patterns of correlations is moderately positive (r = .30).

In further analyses we examined the possibility of subcultural differences in the correlates of behavioral consistency over and above the effect of situational similarity. We divided our total sample into two groups on the basis of self-reported ethnicity: Asians (n = 75) and non-Asians (n = 127). The vector correlation between the two sets of Q-correlates was a modest but positive r =.20, suggesting that the basic pattern does not vary dramatically across the two groups. Perhaps more surprising, many of the Q-items related to psychological adjustment were just as highly or even slightly more highly correlated with behavioral consistency in the Asian subsample than in the non-Asian subsample. For example, among our self-identified Asian participants behavioral consistency was correlated with "cheerful" (r = .25), "social poise and presence" (r = .24), and "satisfied with self" (r = .30). In the Asian group behavioral consistency was negatively correlated with, among other items, "brittle ego-defense system" (r = -.35), "self-defeating" (r = -.33), and "concerned with own adequacy as a person" (r = -.29; all dfs = 73 and ps < .05; item content is abbreviated). Thus, it would appear that in this sample of American college students, Asian ethnicity did not attenuate the relationship between behavioral consistency and psychological adjustment.

We also examined, in addition to the CAQ correlates of behavioral consistency, the Big Five personality correlates in the same fashion (see Table 3). The results indicate that participants who reported being higher in neuroticism also reported less consistent behavior across the four situations, when controlling for situational similarity (r = -.20), t(200) = -2.91, p = .004. This finding, too, was found within the subsample of ethnically Asian participants (r = -.31), t(73) = -2.80, p = .007.

### Discussion

# **Key Substantive Findings**

A central aim of this article was to test the usefulness of the RSQ as a tool for measuring the psychological properties of

Table 2 CAQ Correlates of Consistency of Behavioral Self-Reports Controlling for Situational Similarity

CAQ item	Combined $(N = 202)$	Female $(n = 104)$	Male $(n = 98)$
Positive correlates			
07-Favors conservative			
values	.21**	.28**	.16
84-Is cheerful	.19**	.14	.24*
70-Behaves in ethically			
consistent manner	.19**	.05	.30**
88-Is personally charming	.15*	.13	.17
02–Genuinely dependable			
person	.14*	.13	.18 <sup>†</sup>
92–Has social			
poise/presence	.14*	.21*	.08
33-Calm; relaxed in			
manner	.13 <sup>†</sup>	.16	.09
64-Is socially perceptive	.13 <sup>†</sup>	.09	.17 <sup>†</sup>
93–Behaves in gender			
consistent manner	.12 <sup>†</sup>	.14	.12
03-Has a wide range of			
interests	.12 <sup>†</sup>	.13	.11
Negative correlates			
45–Brittle ego-defense			
system	19**	16	22*
61–Creates/exploits			
dependency in others	18**	13	24*
22-Feels lack of personal			
meaning in life	18*	07	30**
36–Negativistic; tends to			
undermine/sabotage	15*	$19^{\dagger}$	13
69-Sensitive to anything			
that could be a demand	14*	12	16
55–Self-defeating	$14^{\dagger}$	14	13
82-Has fluctuating moods	13 <sup>†</sup>	12	11
13-Thin-skinned; sensitive			
to criticism	$12^{\dagger}$	11	12
38-Hostile toward others	$12^{\dagger}$	11	14
20-Rapid personal tempo	$12^{\dagger}$	15	10

Note. CAQ item content is abbreviated. Female-male vector correlation r = .30. CAQ = California Adult Q-Sort. † p < .10. \* p < .05. \*\* p < .01.

Table 3
Correlates of Self-Reported Big Five With Behavioral
Consistency

			95% confidence interval	
Big Five factor	N	r	Lower limit	Upper limit
Extraversion	201	.04	10	.17
Agreeableness	202	.08	05	.22
Conscientiousness	202	.02	11	.16
Openness	200	01	15	.12
Neuroticism	202	20**	33	06

<sup>\*\*</sup> p < .01.

situations. To this end, we examined four hypotheses. In support of the first hypothesis, participants reported considerable ipsative behavioral consistency across four situations quasirandomly selected from their daily lives. In support of the second hypothesis, indices of situational similarity based on the participants' descriptions of situations, as well as descriptions rendered by independent raters, both indicate that people have a tendency to find themselves in situations that are more similar to each other than to situations experienced by others. In support of the third hypothesis, a strong and positive relationship was found between behavioral consistency and both indices of situational similarity. In addition, the relationship between situational similarity as derived from descriptions by independent raters and behavioral consistency was nearly fully mediated by situational similarity as derived from the participants' own descriptions. Finally, in relation to the fourth hypothesis, although the relationship between situational similarity and behavioral consistency was strong and positive, personality still had a marked relationship with behavioral consistency even when situational similarity was statistically controlled. Participants who reported that they are "ethically consistent," "favor conservative values," and are less neurotic were more behaviorally consistent. The relationship between behavioral consistency and psychological adjustment was found just as strongly, if not more so, among the ethnic Asian participants in our sample.

The findings that people demonstrate high within-subject levels of situational similarity and behavioral consistency, and that these two are highly related to one another, suggest that one explanation for behavioral consistency is that people often find themselves in similar contexts (Ickes et al., 1997). However, situational similarity alone was not able to fully account for the variability in behavioral consistency. When situational similarity was statistically controlled, personality traits offered appreciable gains. This finding implies that some people are even more consistent than one might expect, given the similarity of the situations they experience and that these people tend to be emotionally stable, dependable, and conservative.

The finding that the relationship between situational similarity as derived from descriptions by third parties and behavioral consistency was almost fully mediated by situational similarity as derived from the participants' own descriptions has more than one possible explanation. Perhaps the result stems from methodological overlap; the open-ended descriptions on which the independent raters based their ratings also came from the participants. To assess this possibility, one would ideally want to compare these results

with what one would find if the situations had been directly observed by independent raters. However, the participants' descriptions were generally straightforward descriptions of situational facts (e.g., taking a midterm, playing softball in the park) and might not have been described, at that level, much differently by others who were present. Moreover, as considered in the next section, the research to allow such a comparison would confront daunting operational and ethical obstacles. For this initial effort, gaining insights into contexts of daily life required sacrificing the ability to observe situations directly.

A psychological, rather than methodological, explanation for the mediation effect is that although objective, or factual, features of a situation have important effects on behavior, those features are inevitably filtered through the perceptions of the person who experiences it (Reis, 2008). One can only react to what one perceives, regardless of what actually occurs. To be clear, although it is critically important to measure features of situations separately from features of persons (i.e., objectively), it seems obvious that a person's particular construal of a situation should be especially related to his or her behavior.

# **Limitations and Future Challenges**

One of the challenges for future research on behavioral consistency and situational similarity as manifested in everyday life will be to gather data using methods that go beyond self-report. The present study gathered self-reported information about situations participants had recently experienced along with the participants' behaviors because it aimed to gather information from beyond the laboratory. In the future, researchers might seek ratings of situations and behaviors from others who were present. Another way to move beyond self-report might be to utilize direct observational methods either by physically following participants around in their daily lives or by making sound and video recordings that are later coded for situational and behavioral information. Data gathering of this nature would be extremely time-consuming and expensive (even more so than the present study, which took nearly 2 years to complete), as well as substantially more intrusive into the lives of participants and their acquaintances. Nonetheless, these possibilities merit further consideration (Furr, 2009).

A further challenge for the assessment of situations is to move beyond college student participants toward more representative samples drawn from the broader adult population. As noted in the Results section, approximately 33% of the situations gathered in this study were related to the contexts of undergraduate student life (e.g., "in class," "doing homework"). Although the major findings, that situational similarity and personality predict behavioral consistency, seem likely to generalize, future researchers on situational assessment, especially that which seeks to identify essential types of situations, will have to tackle the difficult issues involved with gathering data from participants other than students, in adult contexts of work and family life. Another useful future direction would be to expand situational research into different cultures. As noted earlier, the association between behavioral consistency and psychological adjustment was strong among self-identified Asian participants, notwithstanding prior suggestions that this association might be weaker or nonexistent (Church, 2009; Suh, 2002). But of course, all of the "Asian" participants in this study were in fact American college students—whether similar results would be found on the Asian continent is a worthwhile subject for further investigation.

The extension of situational assessment into a wider range of settings or cross-cultural contexts may require further revision of the item content of the RSQ or perhaps the development, from the ground up, of entirely new sets of custom-designed items. For example, it is possible to envision items specifically written to assess work-related contexts, medical environments, or the everyday situations of child rearing and family life. Particular theoretical orientations toward the nature of situations, such as evolutionary psychology (e.g., Figueredo, Gladden, Vásquez, Wolf, & Jones, 2009), might also inspire specialized item content, as might the goal to compare the contexts prevalent in different cultures. The RSQ was written to be as general as possible. However, we encourage other investigators to put its content to the test in a wide variety of contexts and to try their hand at writing their own items when useful. The "ultimate set" of situational descriptors may not be imminent, but as the present research demonstrates, such a set is not necessary in order to make research progress now.

# **Implications**

The present findings have a number of implications for personality and social psychology. First, this study is to our knowledge the first to include comprehensive measures of all three elements of the personality triad—persons, behaviors, and situations (Funder, 2006). Indeed, with the introduction of the RSQ, Q-sort assessment devices are now available for all three. Common practice in previous research has been to examine just a few properties of persons, behaviors, or situations, or even just one. The inclusion of more comprehensive assessments allowed this study to illuminate how psychological properties of situations relate to individuals' behavioral consistency as well as how personality relates to behavioral consistency independently of the situations people experience.

Second, the present findings support a growing body of theoretical and empirical literature suggesting that within Western society—including, in our sample, among ethnically Asian participants—behavioral consistency appears to be a hallmark of mental health (Allport, 1955; Block, 1961; Donahue et al., 1993; Furr, 2000; Rogers, 1959; Sheldon, Ryan, Rawsthorne, & Illardi, 1997). The only Big Five marker with a substantial relationship was Neuroticism, which is characterized by anxiety, fearfulness, and emotional instability; and this trait was negatively associated with behavioral consistency. The study also partially replicated Furr (2000), who utilized an ipsative approach to behavioral consistency within an experimental context and found a link between behavioral consistency and positive psychological functioning.

Finally, this study is the first to demonstrate a few of the many potential uses of a standardized taxonomy of situational characteristics, in this case the newly developed RSQ. As noted in the introduction, researchers in personality and social psychology have lamented for nearly 40 years that no such taxonomy yet exists that can be applied to psychological research. As demonstrated here, the RSQ provides one. Moreover, without this taxonomy, the present study would have been impossible. In the experimental context used by Furr and Funder (2004), situational similarity was relatively easy to manipulate and capture because all participants encountered the same small set of experimentally controlled situ-

ations. However, to capture the degree of similarity between two or more situations in real-world contexts, one must measure and compare a wide range of psychological properties. Beyond the purposes for which the RSQ was employed in the present study, it has a large number of other potential uses, including providing template-matching approaches (Bem & Funder, 1978), assessing the nature of experimental manipulations in a single study, comparing experimental manipulations across studies, categorizing types of situations in different cultures, examining individual differences in situation perception or construal, and evaluating person–situation fit in applied settings.

### Conclusion

The present study has demonstrated that behavioral consistency in daily life, ipsatively measured, is strongly and positively related to situational similarity. Taken together with the experimental laboratory findings of Furr and Funder (2004) and other past research, these results make it plausible to conclude that there is a causal relationship such that increased situational similarity yields greater behavioral consistency. However, individual differences in behavioral consistency beyond those explained by situational similarity can also be predicted by personality. Thus, the degree to which an individual will perform the same behaviors at two different times, a few days apart, is largely a function of two things: the similarity between the two situations and the personality of the individual. Finally, this study demonstrates the potential for psychological understanding gained by having an instrument to measure the properties of situations.

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