



## Persons, behaviors and situations: An agenda for personality psychology in the postwar era

David C. Funder\*

Department of Psychology, University of California – Riverside, Riverside, CA 92521, United States

### ARTICLE INFO

#### Article history:

Available online 14 January 2009

#### Keywords:

Personality  
Assessment  
Interactionism

### ABSTRACT

The internecine war over the relative importance of persons and situations, triggered 40 years ago by Walter Mischel's *Personality and Assessment*, is largely over, so it is time for researchers to develop an agenda for personality psychology in the postwar era. The possibilities include a return to the *status quo ante* characterized by questionnaire-based research, focusing on narrower trait constructs than the "global" traits that have undergone so much criticism, and concentrating upon within-person variance (as well as or even instead of between person variance) in behavior. Each of these possibilities offers some promise but also hazards that may be under-appreciated. The present article suggests that personality theory and research be re-organized in terms of the *personality triad* of persons, behaviors, and situations. A precondition for understanding the elements of this triad is better conceptualization and measurement of behavior and, especially, situations. While the interactions among these elements may turn out to be important, a first order of business is to understand the main effects of each element, a formidable but exciting research agenda that will entail a turn to broadly descriptive research rather than the testing of narrow, isolated hypotheses. Looking further ahead, a post-interactionist personality psychology may someday recognize that personality is a latent construct only indirectly indicated through behavior, and the ultimate understanding of that construct will be empirically tested by the ability to predict behavior in new and unique situations.

© 2009 Elsevier Inc. All rights reserved.

### 1. Introduction

The "person–situation debate" triggered by the 1968 publication of Mischel's *Personality and Assessment* ended as a serious scientific conversation decades ago (Kenrick & Funder, 1988). Personality traits are real and important. The days are long past when anybody who followed the literature could seriously entertain arguments that they exist only in the eye of the beholder, are mere social constructions, or have relations with behavior that are too small to matter.

One of the most significant passages in Mischel's book introduced a memorable term:

"...the phrase 'personality coefficient' might be coined to describe the correlation between .20 and .30 which is found persistently when virtually any personality dimension inferred from a questionnaire is related to almost any conceivable external criterion involving responses sampled in a *different* medium – that is, not by another questionnaire." (Mischel, 1968, p. 78, emphasis in the original).

The .30 correlation described as an upper limit later was raised to .40 (Nisbett, 1980), and is better understood than it used to be. Correlations in this range are now acknowledged to be comparable to the size of the effects of some of the major demonstrations of the power of the situation in the social psychological literature (Funder & Ozer, 1983; Richard, Bond, & Stokes-Zoota, 2003), about the maximum that could be theoretically obtained if behavior has multiple determinants (Ahadi & Diener, 1989), and enough to yield correct dichotomous predictions 65–70% of the time (Rosenthal & Rubin, 1982). Even more to the point, measurements of personality – especially but not limited to measurements of five key traits of personality – can predict not only specific behaviors in the lab but also long-term, important life outcomes (Ozer & Benet-Martínez, 2006; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007).

These important insights might not have been achieved without the stimulus of Mischel's controversial phrase. The "personality coefficient" was ahead of its time because its coining anticipated and perhaps helped to instigate the increasing emphasis, in modern research, on effect sizes over significance levels (American Psychological Association, 2001, p. 25; Wilkinson & the Task Force on Statistical Inference, 1999). By reframing the evaluation of consistency of personality in terms of correlation coefficients and the goal of personality as the prediction of important behavioral

\* Fax: +1 951 827 3985.

E-mail address: [funder@ucr.edu](mailto:funder@ucr.edu).

outcomes, Mischel's book opened the door to a clearer and more realistic appreciation of the limits, accomplishments, and opportunities for personality assessment.

While the debate is over, some of its less pleasant residue remains. The (oversimplified) bottom line of *Personality and Assessment* was transformed by some into a putative central theme of social psychology that placed it into opposition with personality (Ross & Nisbett, 1991). For example, a major introductory psychology textbook tells students that "one of the most important lessons of social psychology is that people consistently underestimate the power of situations in affecting human behavior. . . [the tendency] to overemphasize the importance of personality traits and underestimate the importance of [the] situation. . . is so pervasive that it has been called the *fundamental attribution error*" (Gazzaniga & Heatherton, 2006, pp. 608–609, emphasis in the original). This passage is not an isolated instance. The exposition of the fundamental attribution error in almost every introductory textbook enshrines it as an established piece of the conventional wisdom.

However, there are good reasons to doubt that attributions are uniformly biased in the direction posited by the fundamental attribution error (Funder & Fast, in press). If we always underestimated the effect of situations, would not we be shocked by how easy it is to change others' behaviors just by adjusting the situation a little? Would not we be surprised – albeit pleasantly so – by how even small changes in the household environment can change the behavior of our children or spouses in the direction we desire, by how even minor alterations in the classroom situation can improve students' study behavior, or by how simple it is to design effective means to change opinions, lessen crime and promote healthy behavior? And last, but for a psychologist not least, would not we be surprised (and delighted) by how consistently our experimental manipulations produce the hypothesized behavioral effects in our research participants? Instead, of course, we are more often surprised when massive efforts to affect the behaviors of others – ranging from personal interventions to government programs to experimental designs – have disappointingly weak effects. I would not argue here that the error really runs the other direction, that personality is more powerful than we think.<sup>1</sup> But I will observe – as anyone can – that while situations are sometimes surprisingly powerful, sometimes too they are weaker than we might expect or even wish them to be.

Perhaps the fundamental attribution error will be knocked off its high perch only when it becomes so widely accepted (as it nearly is) that it will be counterintuitive to argue that the error lays the other way. In the meantime, the most constructive path lies in another direction. Since the real argument is over, let us unstick ourselves from the residue of the person–situation debate and try to imagine what direction personality psychology will and should take in a postwar environment where it can reunite with rather than continue to be seen at odds with its historic partner, social psychology.

## 2. Restoration of questionnaire research

One possibility for the future of personality psychology is a partial or complete return to the *status quo ante*, as research was practiced in 1965 or so. The most powerful critique Mischel's book offered of personality research as it then existed was that it was overwhelmingly dominated by questionnaire methods. Mischel was on to something when he defined the personality coefficient as a limit on correlations among *non-questionnaire* measures (he

acknowledged that correlations among questionnaire scores are often much higher), and observed how little data were available to test his claim. But with the battle over the existence of personality won, some personality psychologists apparently concluded that they could simply go back to what they were doing before they were so rudely interrupted.

In some cases, this has meant a return to the potentially fascinating, often sophisticated, analytically rich yet empirically cheap and relatively easy world of research on questionnaires. With such data in hand, the analytic possibilities are seemingly endless, including no end of factor analyses, structural equation models, and item response curves. Even without these kinds of sophisticated analysis, many researchers have found it temptingly easy – and in fairness sometimes quite interesting – to hand out a questionnaire measure of aggressive tendencies (say), and a measure of self-esteem (say), calculate the correlation, and then write about how much self-esteem attenuates (or enhances) aggression. Even studies of the "behavioral correlates" of personality often turn out, on close inspection, to be studies of behavioral *questionnaire* correlates (Baumeister, Vohs, & Funder, 2007).

The succumbing to the temptation to gather data that are cheap and easy is not limited to personality psychologists. Social psychologists too – including some who would view themselves as anything but trait researchers – surprisingly often confine their "behavioral" measurements to check marks on a page or, increasingly in the modern age, clicks on a computer screen. If a researcher is extra ambitious he or she might also measure reaction time, but notice that this precisely measured number becomes of interest only with the added assumption that it reflects a process that has implications for *real* – i.e., potentially consequential – behavior, mostly involving the larger skeletal muscles and not just the forefingers of each hand.

To be sure, questionnaire data (such as "S-data," see Block & Block, 1980 and Funder, 2007, chap. 2) can shed useful and important light on personality and behavior. In some cases questionnaire data is necessary and in many cases it is all that is possible (see Baumeister et al., 2007, for a full discussion), and as part of a research program that uses multiple methods to approach complex psychological constructs such data can make an important contribution. But, in the end, it is not questionnaire responses or reaction times that anyone *really* cares about, and the relevance of these measures for consequential social behavior will have to be demonstrated rather than assumed. In other words, on its current path, much of personality *and* social psychology may be setting itself up, slowly but surely, for the assault of a second Mischel.

## 3. Narrower trait constructs

One of the many interpretations I and perhaps others have heard of the message of *Personality and Assessment* is that it is a critique not of trait constructs per se, but specifically of *global* traits. To the extent that this interpretation is correct, then Mischel was part of a movement from the general to the specific that can also be seen, for example, in the evolution of Social Learning Theory from Julian Rotter to Albert Bandura. Whereas Rotter (e.g., 1954) was interested in Generalized Expectancies, the degree to which a person might expect to have an impact on *any* area of his or her life, Bandura (e.g., 1971) was more prone to focus on whether someone had the expectancy that he or she could perform some specific action, such as stick to a diet or (classically) enter the same room as a snake. In the realm of trait psychology, the distinction is between measuring something like sociability, compared to social skill, compared to social skill at leading a business meeting. As the predictor becomes closer and closer to being as specific as the criterion, the predictive validity can confidently (and almost by definition) be expected to increase.

<sup>1</sup> I resist such temptation because an even deeper flaw in the logic of a "fundamental attribution error," in either direction, is the mistaken assumption that persons and situations compete for psychological importance in a zero-sum game (see Funder, 2006; Funder & Fast, in press).

Something about the term “global trait” does sound unsophisticated and old-fashioned, and narrower constructs certainly appear more precise, focused, and contextualized. Rather than viewing a trait as something that affects an individual’s behavior across many of the contexts of his or her life, it becomes something more fine grained that depends upon the specifics of a situation to be evoked. Mary is dominant, but only at work, not at home. So we oversimplify if we say she is “dominant”; rather we should view her in terms of (at least) two traits, dominant-at-work, and not-dominant-at-home. And maybe at home she accedes to her husband’s decisions on what to have for dinner, but not how to spend money. So now she’s dominant-in-spending-decisions-at-home, but not-dominant-in-dining-decisions-at-home. Our understanding of Mary is increasing by leaps and bounds, it would seem.

Indeed, this kind of ever-increasing specificity and precision is attractive. For that reason some writers have described narrower trait constructs as an important improvement and advance in sophistication over their broader, cruder cousins (see Funder, 1991). However, this ever-increasing precision has some costs. As Albert Bandura once wrote, in a slightly different context:

“Once one starts fractionating the self, where does one stop? For example, an athletic self can be split into an envisioned tennis self and a golfing self. These separable selves would, in turn, have their subselves. Thus, a golfing self can be subdivided into different facets of the athletic ability to include a driving self, a fairway self, a sand-trapped self, and a putting self. How does one decide where to stop fractionating selves?” (Bandura, 1999, p. 194).

Substitute the word “personality” for the word “self” in the paragraph above,<sup>2</sup> and one problem with having constructs become narrower and narrower becomes vividly apparent. You can always get narrower, and narrower is always more precise, so where do you stop?

But that is not even the worst problem with ever-more-specific constructs. The narrower a construct becomes, the less explanation it offers (Wood, 2007). The increasing fidelity of prediction comes at the cost of narrowing bandwidth, potentially to the point of circularity. As I have observed elsewhere (Funder, 1991), it seems ironic that global traits are sometimes accused of offering circular explanations for behavior when really it is narrow constructs that manifest this vice. If one observes that someone has many friends and therefore infers that he or she is high on extraversion, then this may lead to a prediction (via the inference of a global trait) that he or she will be high on energy and positive affect and will prefer music to be turned up loud. This prediction might well be wrong, which is precisely what makes it non-circular and interesting. On the other hand, if one observes that someone is dominant in business meetings and concludes that this is because the person has the tendency to be dominant in business meetings, but eschews further inference, then this conclusion has added little to psychological understanding.

#### 4. Focusing on within-person variance

People are different from each other, but they also differ with themselves, in the sense that every individual varies how he or she acts and feels, to some degree, depending upon the situations in his or her life. A new direction that has been prominently suggested for the future of personality psychology is to alter the traditional focus on between person variance to yield a sharper view of within-person variance.

This shift in focus is the basic contribution of Mischel and Shoda’s (1995; see also Mischel, 1999) “if...then” conceptualization, in which each individual is described in terms of the specific behaviors he or she does under certain circumstances. For example, someone might be described as being unsociable “if” in a work situation, but highly sociable “if” in the home context. In a similar vein, Fleeson (2001) describes a reconceptualization of personality traits in terms of frequency distributions of states, so that a sociable person would be described in terms not only of his or her mean level of sociability, but also the size (standard deviation) and shape (skew) or his or her distribution of sociable states across occasions. Recently, Fournier, Moskowitz, and Zuroff (2008) contributed an analysis of how the behaviors of individuals across the contexts of their lives can be characterized both in terms of general dispositions and idiosyncratic but stable “signatures.”

It is obviously true that every individual does vary in what he or she does and feels depending upon the situation he or she is in, and equally obviously true that every individual’s exact pattern is unique. The traditional approach to personality traits tends to gloss over these facts by characterizing people in terms of their average behaviors across the situations of their lives. Much of the appeal of *Personality and Assessment* and of latter-day approaches such as those by Mischel, Fleeson, and Fournier is that they pay attention to this facet of behavioral variance that trait approaches ignore (although Allport, 1937, considered the issue at length). Personality psychology should strive to account for within-person variation in behavior as well as between person variation, and the approaches just listed, and others, perform a valuable service in reminding us of this goal (Roberts, 2007).

However, a tight focus on the pattern of behavior within each individual opens some pitfalls of its own. First of all, some within-person variation is simply error variance. The detection of reliable and therefore meaningful patterns of within-person variance is statistically handicapped because it depends upon the measurement of a residual, the behavioral variance that remains *after* general dispositions have had their say. This is probably why, as Chaplin (1991) noted years ago, robust and replicable person-situation interactions are so difficult to find. To be sure, the studies by Mischel and Shoda, by Fleeson, and by Fournier and his colleagues all showed some degree of stability to the idiosyncratic behavioral patterns that individuals manifested over and above their consistent trait levels. But in an informative analysis, Fournier et al. (2008) noted that while the “stability estimates [of behavioral dispositions] for all dimensions of behavior hovered around .80” (p. 539), the stability of behavioral signatures was approximately .30 – a number that might sound familiar.

A focus on within-person variance raises other issues, including questions as to whether it in some respects amounts to a reinvention of Watson’s S-R behaviorist view of personality, or leads inevitably to replacing dispositional constructs with types (Funder, 2006, 2008). However, the most important question facing research on within-person variance is whether it can be shown to be interesting or useful. It is one thing to identify within-person patterns that have some degree of stability, as we have seen. It is quite another to show that these patterns are psychologically meaningful. Historically, the traditional trait concepts of personality psychology have earned their keep by showing implications in two directions: the past and the future. One fruitful line of research concerns the origins of traits, in the interactions between genetics and environments (e.g., Caspi, Roberts, & Shiner, 2005). The other, even more implicative, concerns the important patterns of behavior and life outcomes associated with traits (e.g., Ozer & Benet-Martinez, 2006, Roberts, et al., 2007). To the extent that stable patterns of within-person variance can be detected, and that remains to be seen, the next order of business will be to ask two questions: Where do these patterns come from? How are they important?

<sup>2</sup> This substitution is often useful when reading the psychological literature.

## 5. The personality triad

One potential way to organize the future agenda of personality research, including the issues summarized above, might be in terms of what I have called the *personality triad*: persons, situations and behaviors (Funder, 2006, 2008). These are the three terms in the famous equation proposed by Lewin (1951),  $B = f(P, S)$ , behavior is a function of the person and the situation. While this equation has sometimes been oversimplified and misused (e.g., in attempts to use the analysis of variance to see whether persons or situations are more powerful), the basic conceptual idea is interesting and important. It implies, in brief, that the best way to understand a behavior is in terms of who performs it, and the circumstances under which they do so. If we want to understand aggressive behavior, or altruistic behavior, for example, a promising route is in terms of who acts aggressively or altruistically, and under what circumstances. Lewin's formula provides a way to give both persons and situations their due while avoiding fruitless arguments over which one matters more.

Further, it can be an interesting exercise to arrange the terms in Lewin's equation to see if insights into the other two elements of the triad arise. One rearrangement,  $P = f(B, S)$  implies that a good way to describe a person psychologically might be in terms of the behaviors he or she performs and the situations in which he or she performs them. This interaction is consistent with the conceptualization of the person represented by Watsonian behaviorism as well the more recent *if...then* description of personality and some of the other approaches focusing on within-person variance, discussed earlier.

The other rearrangement,  $S = f(B, P)$ , suggests that a situation can be thought about and described in terms of the behaviors that different people perform within it. This might be the least immediately obvious of the three interlocking interactions of the personality triad. But it is not a new idea, having been the basis of the "template-matching technique" introduced by Daryl Bem and myself (when I was a graduate student) in 1978. To use an example from that paper, the differing environments of two colleges might be usefully described in terms of the different kinds of student who tend to do well in each of them. Workplaces or jobs might be described in terms of the people who are the best "fit" to them. And particular social situations ranging from parties to congested freeways could be psychologically characterized by descriptions of the people most likely to enjoy or become frustrated by them.

## 6. Assessing the elements of the personality triad

To move these conceptions of the personality triad beyond the level of abstract speculation, some way must be found to operationalize each of its elements for empirical research. This observation draws attention to the fact that while methods for assessing dimensions of individual differences across persons abound, equivalently-sophisticated, parallel methods for assessing behaviors or situations are painfully lacking.

The inclusion of behavior in psychological research in social as well as personality psychology is less common than one might expect (Baumeister et al., 2007), and when it is included the behavioral measure is typically an *ad hoc* observation of a response or two particular to the specific topic under investigation. Even "behaviorism," which by its name might lead to an expectation of a focus on behavior, tended to regard all behaviors as functionally equivalent – salivating was treated much the same as bar pressing – and did not yield a taxonomy. But not all behaviors are the same and humans yield a rich variety of them (Furr & Funder, 2007).

The plight may be even worse for situations. While *Personality and Assessment* and the conversation it initiated often spoke of the power of the situation to affect behavior, its magnitude was typically demonstrated through subtraction. Writers would observe that one or another personality variable failed to account for all the variance in a particular behavior, and simply assign the remainder to the situation. As a result, the psychologically active ingredients of situational effects on behavior never received much specific attention within personality psychology, not even from those writers who wished to emphasize how important they are.

Instead, the psychology of situations, such as it exists, developed within experimental social psychology. A large variety of creative studies manipulated specific aspects of situations as experimental independent variables. These variables included such interesting properties of situations as incentive, experimenter proximity, and the degree to which someone is in a hurry (see Funder & Ozer, 1983 for a calculation of the size of the effect of these variables in classic experimental studies). But the psychology of situations as represented by experimental social psychology remains unorganized. The particular independent variable manipulated in a given study is determined by the content area and specific hypothesis that study is designed to address. Across thousands of such studies, no larger scheme organizes the many aspects of situations that have been demonstrated to be important (Wagerman & Funder, in press).

It was in an attempt to begin to be part of the solution to these problems that our lab developed two new Q-sort assessment tools. Both were inspired and to some degree based upon the California Adult Q-sort (CAQ) for the description of personality developed by Block (2008). This instrument includes 100 items such as "is critical, skeptical, not easily impressed" and "has a wide range of interests," which clinical experts or lay raters can use to describe an individual by sorting the items into a forced, symmetric, nine-category distribution ranging from "not at all characteristic" to "highly characteristic." The CAQ was painstakingly developed over a period of decades, offers probably the most comprehensive tool for describing personality that is available, and has an impressive record of conceptual and empirical success in relation to a wide range of behaviors in children, adolescents and adults (for several examples, see Funder, 2007, pp. 187–198).

With this Q-sort as a model, some years ago we developed the Riverside Behavioral Q-sort (RBQ; Funder, Furr, & Colvin, 2000), which in its most recent revision (see <http://rap.ucr.edu/qsorter/rbq3.htm>) offers 67 variables for the description of social behavior. The items describe behavior at a level of generality meant to be intuitively meaningful and intrinsically important, yet also specific enough to allow for reliable rating. For example, the items include "acts irritated" (item 31) and "behaves in a fearful or timid manner" (item 36). In one study of particular interest, the RBQ was used to demonstrate the ways in which the behavior changed across different situations at the same time that the cross-situational consistency of behavior across those same two situations – as indexed by the maintenance of individual differences – remained high (Funder & Colvin, 1991; see also Funder, 2006). Originally designed for the description of social behaviors in two-person interactions in the laboratory, it has recently been expanded and rewritten in an attempt to make it more broadly useful.

More recently, we have begun development of the Riverside Situational Q-sort (RSQ, see Wagerman & Funder, in press). The current version includes 81 items meant to describe psychologically salient elements of a wide if probably not exhaustive range of social situations, including "situation is uncertain or complex" (item 8) and "a job needs to be done" (item 23; the complete set of items can be seen at <http://rap.ucr.edu/qsorter/>). The intention is for

people who have participated in, experienced, or observed a psychological situation to be able to translate their subjective impressions into an empirically usable format with a common vocabulary – the exact purpose of Q-sort methodology in general (see Block, 2008). The hope is that these descriptions will provide a firm foundation for subsequent empirical study of the interactions between persons, behaviors and situations.

A further hope is that this instrument will help to reunite the complementary methods of social and personality psychology. Social psychological research typically manipulates specific aspects of experimental situations, and the difference between the two situations provides the study with its independent variable. Personality research generally uses correlational methods to assess personality traits and other stable individual differences. The RSQ provides a potential means to assess the situations that people experience in real life as well as specific experimental contexts, using the same variables. A typical college-student participant who one day enters a psychological laboratory may be moving from a classroom environment in the previous “real life” hour to a contrived social interaction during the experimental hour, but from his or her point of view they are just two different situations each of which can, in principle, be described along common dimensions. It is the goal of the RSQ to provide progress towards understanding what these dimensions are.

### 7. Agenda for research on the personality triad: three main effects

Each element of the personality triad interacts with the other two, producing three unique interactions. But before plunging into attempts to detect and understand these interactions, with all the entailed difficulties discussed earlier in this article, it might be easier and more fruitful to pause for a bit, and learn more about the associated three main effects. These three main effects are the relations between persons and behaviors, between situations and behaviors, and between persons and situations.

$P \rightarrow B^3$ : What do certain people – meaning (unless one prefers typologies) what do people with certain levels of particular traits – generally tend to do? The connection illustrated by the arrow in this formula refers to the relationship between the assessed level of a personality construct – which might be based on self-report, peer report, expert judgment and other sources of data – and behaviors that a person has been observed to perform at particular times and in particular places. By necessity, establishing this connection will require averaging behaviors across situations, a practice lamented in the pages of *Personality and Assessment*. But a personality construct worthy of the name requires precisely this kind of averaging, to allow the effect of the person on behavior to emerge from and be analytically separated from the effects of particular situations (e.g., Funder, 2006, 2008). They can always be recombined later, if analytic strategy or theoretical purpose so dictates. But as Mischel observed in 1968, and as remains true today, behavior is surprisingly seldom directly observed in psychological research (Baumeister et al., 2007), despite the fact that questionnaires such as those measuring the “Big Five” (John, Naumann, & Soto, 2008) or the Act Frequency Approach (e.g., Buss & Craik, 1983) often define traits in terms of self-reported behaviors. Using techniques such as the RBQ, an important task for the immediate future of personality psychology is to begin the long-overdue task of descriptively mapping the terrain of relation-

ships between personality and behaviors that have actually been observed and, ideally, videotaped. For every trait deemed important or interesting, we should – but do not – have a list of the behaviors with which it, on average, across situations, tends to be associated.<sup>4</sup>

$S \rightarrow B$ : The second main effect lies at the core of the “situationist” view of behavior, which concerns the way in which situations affect what people do. During the person–situation war, probably too much attention was given to the question of “how much” situations affect behavior, and not enough to the question of “how.” It is high time to address the latter question. This enterprise requires variables for the assessment of both situations and behaviors. Candidates for these two roles include the Riverside Situational Q-sort (RSQ, Wagerman & Funder, in press), and the Riverside Behavioral Q-sort (RBQ, Funder et al., 2000) described earlier. Preliminary research using these two instruments has found, for example, that situations that afford the opportunity to be talkative evoke behavior that is not only talkative, as might be expected, but also behaviors that can be described as agreeable, intimate, and socially skilled.

Much more remains to be done and other, different instruments could and should be developed to capture the essential elements of both situations and behaviors. It should be emphasized, again, that the real situationist agenda is barely begun. Specifically: which elements of psychological situations affect which behaviors, how, and why?

$P \rightarrow S$ : In what kinds of situations do different kinds of people tend to find themselves or even tend to create? While past writers have occasionally written about how people differentially sort themselves into and affect the situations of their lives, little empirical work has followed on this insight, probably because of a lack of an adequate conceptualization or assessment tool for situations. The RSQ and other methods may offer a way to make these kinds of person–situation interactions concrete at last. If we had measures of a sample of individuals’ personalities on the one hand, and measures of situations that they (on average) experience in a day, week, month or year on the other hand, we could begin to map out how the terrain of individuals’ social environments differ as a function of their personalities, and vice versa. For example, our own preliminary research using the RSQ suggests that people high on the trait of Neuroticism are more likely to find themselves in situations that are evocative of rebelliousness, frustration, and hostility. But again, much more remains to be done, including the development of alternative instruments for exploring the relationship between persons and situations.

### 8. First things first

The research agenda mapped out above will need to overcome some formidable obstacles. Despite the rise (and partial fall) of behaviorism, and despite the many odes written to the power of the situation, psychology is still in the early stages of developing conceptualizations of behavior that recognize not all behavior is the same, and that seek to identify the psychologically active ingredients of situations. The translation of these developing conceptualizations into tools for assessing behavior and situations (such as the RBQ and the RSQ) is also a task still in its early days and much remains to be done, both to further refine these instruments and to develop serious alternatives (and hopefully competitors) to them (Furr & Funder, 2007; Wagerman & Funder, in press).

A massive empirical effort will be required, requiring studies in which individuals are each placed into or observed in each of a

<sup>3</sup> The arrows in this section should technically be double-headed because the associated research is correlational. However, there is some usefulness in thinking about how persons affect behaviors, how situations affect behaviors, and how persons affect situations, even though instances might be conceivable where the causality runs the other direction.

<sup>4</sup> The assembly of such a catalog was at one time proposed as a long-term goal of the Act Frequency Approach (Buss & Craik, 1983, pp. 199–120), but the project was never completed.

range of different situations, and their behavior in them observed and measured directly.<sup>5</sup> Studies that do this are almost unknown in the literature, not really because psychologists do not grasp the need for them, but because they are so difficult and expensive to conduct.<sup>6</sup> A study of children at a summer camp by Hartshorne and May (1928), in which the behavior of each child was measured in a variety of situations, continued to garner an astonishing number of citations for more than half a century precisely because nobody had the resources (or perhaps sufficient ambition) to do a study like that again (for exceptions see Funder & Colvin, 1991 and Shoda, Mischel, & Wright, 1993). But that is precisely the kind of work that is desperately needed.

And the operational difficulties may not even present the most daunting obstacle. Even if we had adequate conceptualizations and useful assessment tools for behavior and situations ready to go, today, and the kind of ambitious design and resources for the complex studies needed to empirically assess the relations among the elements of the personality triad, one more problem would remain. The research that needs to be done is *descriptive*. There is nary a hypothesis to be seen. How are person variables interconnected to situational variables and behaviors? The hypothetico-deductive method psychologists were all taught to revere, and that granting agencies and journal reviewers so often require, is a poor fit to what needs to be done.

Paul Rozin has written compellingly about this problem. The so-called “more developed” sciences of physics and, especially, biology, rely heavily on descriptive research. The structure of DNA was probably the major discovery in the history of biology and its research – and current mapping of the human genome – is not hypothesis-driven. In personality psychology, as well, we have some basic mapping to do. Hypotheses concerning specific relations among persons, situations and behaviors could be formulated or, frankly, made up, but at this point they would be premature at best and artificial at worst and, in the words of Solomon Asch, “one does not advance time by moving the hands of the clock” (Asch, 1952, cited in Rozin, 2001, p. 2; see also Kagan, 2007).

Studies that test hypotheses about how one individual difference variable interacts with experimental manipulation of one situational variable to affect one behavioral outcome can be interesting, valuable, and for the most part represent the current state of the art. But we need a map of the broader terrain. What do self-conscious people, happy people, or those who are attributionally complex actually *do*, and under what circumstances do they do it (e.g., Creed & Funder, 1998; Fast, Reimer, & Funder, 2008; Nave, Sherman, & Funder, 2008)? To allow that map to be made, granting agencies need to be willing to fund descriptive studies, and journals need to publish them. Specific hypotheses can come later. First thing first.

## 9. Post-interactionism

The goal of developing a thorough understanding of the interconnections among persons, situations and behaviors presents an exciting and challenging agenda that could keep personality psychology busy for many years. But I would like to conclude by taking an even longer view. A complete analysis of person–

situation-behavior main effects and interactions is not an end in itself. Rather, it is a means towards understanding something deeper and more mysterious: the nature and workings of personality. What I mean is not the group of traits (or set of types) with which personality is usually described or through which it is usually assessed, but the mysterious entity within the mind which is the source of all the behaviors and feelings that make up psychological life. The reason we put so much effort into puzzling through all of our data and the complex interactions among persons, situations and behaviors is to move, ever-so-gradually, towards an understanding of this underlying entity.

Imagine that tomorrow you find yourself halfway up climbing Mt. Everest, or undergoing enemy fire, or being handed a check for one hundred million dollars from the California Lottery. How will you react? How could you possibly know? Presumably, you have never previously experienced anything remotely comparable. Yet the answer to this question lies within you, in your personality *as it exists right now*. In principle, it ought to someday be possible to understand an individual's personality so thoroughly as to be able to anticipate what he or she would do in completely new and unique situations. That entity – personality itself – is a latent construct in more than a statistical sense, and is at best only indirectly suggested through its behavioral manifestations. That is what Freud believed, and I do too.

## Acknowledgments

Preparation of this article was supported, in part, by National Science Foundation Grant BCS-0642243. The opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation. R. Michael Furr provided useful comments on an earlier draft of this article, but the errors and lapses of judgment that remain are solely the responsibility of the author.

## References

- Ahadi, S., & Diener, E. (1989). Multiple determinants and effect size. *Journal of Personality and Social Psychology*, 56, 398–406.
- Allport, G. W. (1937). *Personality a psychological interpretation*. New York: Henry Holt & Co.
- American Psychological Association (2001). *Publication manual of the American Psychological Association*. Washington, DC: American Psychological Association.
- Asch, S. E. (1952). *Social psychology*. New York: Oxford University Press.
- Bandura, A. (1971). *Social learning theory*. New York: General Learning Press.
- Bandura, A. (1999). Social cognitive theory of personality. In D. Cervone & Y. Shoda (Eds.), *The coherence of personality: Social-cognitive bases of consistency, variability and organization*. New York: Guilford.
- Baumeister, R. F., Vohs, K. D., & Funder, D. C. (2007). Psychology as the science of self-reports and finger movements: Whatever happened to actual behavior?. *Perspectives on Psychological Science* 2, 396–403.
- Block, J. (2008). *The Q-sort method in personality assessment and psychiatric research* (rev. ed.). Washington, DC: American Psychological Association [Original edition published 1961].
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), *Development of cognition affect and social relations: The Minnesota symposia on child psychology* (Vol. 13, pp. 40–101). Hillsdale, NJ: Erlbaum.
- Buss, D. M., & Craik, K. H. (1983). The act frequency approach to personality. *Psychological Review*, 90, 105–126.
- Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, 56, 453–484.
- Chaplin, W. F. (1991). The next generation of moderator research in personality psychology. *Journal of Personality*, 59, 143–178.
- Creed, A. T., & Funder, D. C. (1998). The two faces of private self-consciousness: Self-report, peer-report and behavioral correlates. *European Journal of Personality*, 13, 539–542.
- Fast, L. A., Reimer, H. M., & Funder, D. C. (2008). The social behavior and reputation of the attributionally complex. *Journal of Research in Personality*, 42, 208–222.
- Fleeson, W. (2001). Towards a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology*, 80, 1011–1027.

<sup>5</sup> The classic studies of social psychology placed subjects into evocative situations (e.g., Milgram's obedience experiment, the Zimbardo prison study), but almost never, if ever, placed the same participant into *more than one* situation so that consistent patterns of behavior and associated traits could be detected.

<sup>6</sup> One often-overlooked consideration is that while questionnaires typically have dozens or even hundreds of items, behavioral studies have just one or at best a few. Until and unless the resources can be found to conduct behavioral measurement of individuals on a scale not yet attempted, we may have to adjust our benchmarks for what counts as a large or important effect (see Roberts, 2007), especially when comparing the results of questionnaire studies with results of behavioral ones.

- Fournier, M. A., Moskowitz, D. S., & Zuroff, D. C. (2008). Integrating dispositions, signatures, and the interpersonal domain. *Journal of Personality and Social Psychology*, 94, 531–545.
- Funder, D. C. (1991). Global traits: A neo-Allportian approach to personality. *Psychological Science*, 2, 31–39.
- Funder, D. C. (2006). Towards a resolution of the personality triad: Persons, situations and behaviors. *Journal of Research in Personality*, 40, 21–34.
- Funder, D. C. (2007). *The personality puzzle* (4th ed.). New York: Norton.
- Funder, D. C. (2008). Persons, situations and person–situation interactions. In O. P. John, R. Robins, & L. Pervin (Eds.), *Handbook of personality* (3rd ed.). New York: Guilford.
- Funder, D. C., & Fast, L. M. (in press). Personality in social psychology. In D. Gilbert & S. Fiske (Eds.), *Handbook of social psychology* (5th ed.). New York and Oxford: Oxford University Press.
- Funder, D. C., & Colvin, C. R. (1991). Explorations in behavioral consistency: Properties of persons, situations, and behaviors. *Journal of Personality and Social Psychology*, 60, 773–794.
- Funder, D. C., Furr, R. M., & Colvin, C. R. (2000). The Riverside behavioral Q-sort: A tool for the description of social behavior. *Journal of Personality*, 68, 451–489.
- Funder, D. C., & Ozer, D. J. (1983). Behavior as a function of the situation. *Journal of Personality and Social Psychology*, 44, 107–112.
- Furr, R. M., & Funder, D. C. (2007). Behavioral observation. In R. Robins, C. Fraley, & R. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 273–291). New York: Guilford.
- Gazzaniga, M. S., & Heatherton, T. F. (2006). *Psychological Science* (2nd ed.). New York: W.W. Norton.
- Hartshorne, H., & May, M. A. (1928). *Studies in deceit*. New York: Macmillan.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy. In O. P. John, R. Robins, & L. Pervin (Eds.), *Handbook of Personality* (3rd ed.). New York: Guilford.
- Kagan, J. (2007). A trio of concerns. *Perspectives on psychological science*, 2, 361–376.
- Kenrick, D. T., & Funder, D. C. (1988). Profiting from controversy: Lessons from the person-situation debate. *American Psychologist*, 43, 23–34.
- Lewin, K. (1951). *Field theory in social science*. New York: Harper.
- Mischel, W. (1968). *Personality and assessment*. New York: Wiley.
- Mischel, W. (1999). Personality coherence and dispositions in a cognitive-affective personality system (CAPS) approach. In D. Cervone & Y. Shoda (Eds.), *The coherence of personality: Social-cognitive bases of consistency variability and organization* (pp. 37–60). New York: Guilford.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246–268.
- Nave, C. S., Sherman, R. A., & Funder, D. C. (2008). Beyond self-report in the study of hedonic and eudaimonic well-being; Correlations with acquaintance reports, clinician judgments and directly observed social behavior. *Journal of Research in Personality*, 42, 643–659.
- Nisbett, R. E. (1980). The trait construct in lay and professional psychology. In L. Festinger (Ed.), *Retrospections on social psychology* (pp. 109–130). New York: Oxford University Press.
- Ozer, D. J., & Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57, 401–421.
- Richard, F. D., Bond, C. F., Jr., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, 7, 331–363.
- Roberts, B. W. (2007). Contextualizing personality psychology. *Journal of Personality*, 75, 1071–1082.
- Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science*, 2, 313–345.
- Rosenthal, R., & Rubin, D. B. (1982). A simple, general purpose display of magnitude of experimental effect. *Journal of Educational Psychology*, 74, 166–169.
- Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. New York: McGraw-Hill.
- Rotter, J. B. (1954). *Social learning and clinical psychology*. Englewood Cliffs, NJ: Prentice-Hall.
- Rozin, P. (2001). Social psychology and science: Some lessons from Solomon Asch. *Personality and Social Psychology Review*, 5, 2–14.
- Shoda, Y., Mischel, W., & Wright, J. C. (1993). The role of situational demands and cognitive competencies in behavior organization and personality coherence. *Journal of Personality and Social Psychology*, 65, 1023–1035.
- Wagerman, S. A., & Funder, D. C. (in press). Situations. In P. J. Corr & G. Matthews (Eds.), *Cambridge handbook of personality*. Cambridge: Cambridge University Press.
- Wilkinson, L., & The Task Force on Statistical Inference APA Board of Scientific Affairs (1999). Statistical methods in psychology journals: Guidelines and explanation. *American Psychologist*, 54, 594–604.
- Wood, D. (2007). Using the PRISM to compare the explanatory value of general and role-contextualized trait ratings. *Journal of Personality*, 75, 1103–1126.