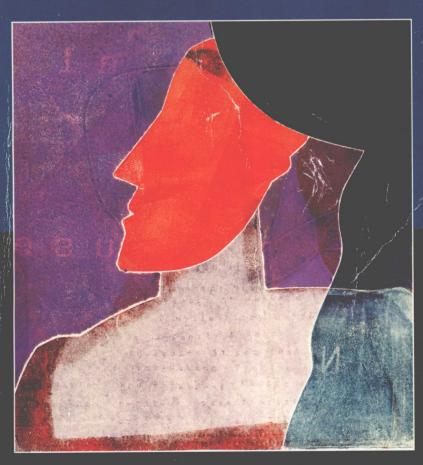
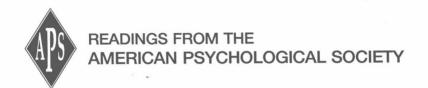


# CURRENT DIRECTIONS PERSONALITY PSYCHOLOGY



Edited by CAROLYN C. MORF AND OZLE<u>M AYDUK</u>





## Current Directions in PERSONALITY PSYCHOLOGY

EDITED BY

Carolyn C. Morf University of Bern

and

Ozlem Ayduk University of California—Berkeley



Upper Saddle River, New Jersey 07458



## © 2005 by PEARSON EDUCATION, INC. Upper Saddle River, New Jersey 07458

Current Directions © American Psychological Society 1010 Vermont Avenue, NW Suite 1100 Washington, D.C. 20005-4907

All rights reserved

1098765432

ISBN 0-13-191989-X

Printed in the United States of America

### **Contents**

### Readings from Current Directions in Psychological Science

Personality Defined: The Issue of Stability 1
Robert R. McCrae and Paul T. Costa, Jr. The Stability of Personality: Observations and Evaluations (Vol. III, No. 6, 1994, pp. 173–175) 3
Walter Mischel, Yuichi Shoda, and Rodolfo Mendoza-Denton Situation-Behavior Profiles as a Locus of Consistency in Personality (Vol. XI, No. 2, 2002, pp. 50–54) 9
William Fleeson Moving Personality Beyond the Person-Situation Debate (Vol. XIII, No. 2, 2003, pp. 83–87) 15
Critical Thinking Questions 23
The Role of Biological Mechanisms in Personality 25
Dario Maestripieri Biological Bases of Maternal Attachment (Vol. X, No. 3, 2001, pp. 79–83) 27
Janet A. DiPietro The Role of Prenatal Maternal Stress in Child Development (Vol. XIII, No. 2, 2004, pp. 71-74) 33
Margaret E. Kemeny The Psychobiology of Stress (Vol. XII, No. 4, 2003, pp. 124–129) 40
Rick A. Bevins Novelty Seeking and Reward: Implications for the Study of High-Risk Behaviors (Vol. X, No. 6, 2001, pp. 189–193) 49
Kimberly J. Saudino Moving Beyond the Heritability Question: New Directions in Behavioral Genetic Studies of Personality (Vol. VI, No. 4, 1997, pp. 86–90) 57
Critical Thinking Questions 65

Personality in Action: Intrapersonal Processes

67

James J. Gross

Emotion Regulation in Adulthood: Timing Is Everything

(Vol. X, No. 6, 2001, pp. 214–219) 70

Gisela Labouvie-Vief

Dynamic Integration: Affect, Cognition, and the Self in Adulthood (Vol. XII, No. 6, 2003, pp. 201–206) 78

Michael D. Robinson

Personality as Performance Categorization Tendencies and Their Correlates (Vol. XIII, No. 3, 2004, in press) 87

Nancy Cantor and Robert E. Harlow

Personality, Strategic Behavior, and Daily-Life Problem Solving (Vol. III, No. 6, 1994, pp. 169–172) 93

William B. Swann, Jr.

Seeking "Truth," Finding Despair: Some Unhappy Consequences of a Negative Self-Concept (Vol. I, No. 1, 1992, pp. 15–18) 100

Roy F. Baumeister, Brad J. Bushman, and W. Keith Campbell Self-Esteem, Narcissism, and Aggression: Does Violence Result From Low Self-Esteem or From Threatened Egotism? (Vol. IX, No. 1, 2000, pp. 26–29) 107

115

Critical Thinking Questions 113

**Personality in Relational Contexts** 

H.H. Goldsmith and Catherine Harman

Temperament and Attachment; Individuals and Relationships (Vol. III, No. 2, 1994, pp. 53–57) 118

Susan M. Andersen and Michele S. Berk

The Social-Cognitive Model of Transference: Experiencing Past Relationships in the Present (Vol. VII, No. 4, 1998, pp. 109–114) 125

Mark R. Leary

Making Sense of Self-Esteem (Vol. VIII, No. 1, 1999, pp. 32–35) 137

Gene H. Brody

Siblings' Direct and Indirect Contributions to Child Development (Vol. XIII, No. 3, 2004, in press) 143

Frank D. Fincham

Marital Conflict: Correlates, Structure, and Context (Vol. XII, No. 1, 2003, pp. 23–27) 149

Michael E. McCullough

Forgiveness: Who Does It and How Do They Do It? (Vol. X, No. 6, 2001, pp. 194–197) 157

Critical Thinking Questions 164

### Implications of Personality for Well-Being 165

### Emmy E. Werner

Resilience in Development (Vol. IV. No. 3, 1995, pp. 81–85)

### Steven R. Asher and Julie A. Paquette

Loneliness and Peer Relations in Childhood (Vol. XII, No. 3, 2003, pp. 75–78) 174

### Susan Folkman and Judith Tedlie Moskowitz

Stress, Positive Emotion, and Coping (Vol. IX, No. 4, 2000, pp. 115–118) 181

### Dacher Keltner, Ann M. Kring, and George A. Bonanno

Fleeting Signs of the Course of Life: Facial Expression and Personal Adjustment (Vol. VIII, No. 1, 1999, pp. 18–22)

#### Kristina M. DeNeve

Happy as an Extraverted Clam? The Role of Personality for Subjective Well-Being (Vol. VIII, No. 5, 1999, pp. 141–144) 195

187

#### Linda S. Gottfredson and Ian J. Dearv

Intelligence Predicts Health and Longevity, but Why? (Vol. XIII, No. 1, 2004, pp. 1–4) 201

### J. Kevin Thompson and Eric Stice

Thin-Ideal Internalization: Mounting Evidence for a New Risk Factor for Body-Image Disturbance and Eating Pathology (Vol. X, No. 5, 2001, pp. 181–183) 208

Critical Thinking Questions 213

### Personality Defined: The Issue of Stability

Personality psychology aims to understand enduring individuating tendencies for people to experience and display particular characteristic patterns of thought, feeling, and social behavior over time and across situations. Put simply, the goals are to comprehend how people differ from each other in meaningful ways, so that we can understand and predict how each will respond and behave in a given situation. Clearly underlying this endeavor is the assumption that there is some kind of coherence to people's responding and that we can "decode" this coherence by examining the basic processes by which people adapt to their own particular life circumstances. As such, personality psychology is the study of the person as a whole, embedded in his or her biological and social context. To fully be able to make sense of individuals' patterns of adaptation means to understand the biological and genetic contributions to personality, the affective and cognitive mechanisms. as well as the interpersonal and social processes in which personality functions. In short, personality thus is the study of both classes and categories of dispositional tendencies, as well as the processes that underlie and define these tendencies. Articles in this volume represent current directions and most recent findings, sampling from all aspects of this contemporary definition of personality, but first we begin with a broader conceptual issue.

The notion of coherence in personality has never been in question, as personality psychology would not make sense without it. No doubt however, if personality deals with people's adaptations to their life circumstances, there will be both change and stability in personality. Thus, a particularly thorny issue that has troubled personality psychologists for a long time is what kind of consistency or stability in responding is needed for there to be coherence. The three articles in this first section illustrate this challenge and struggle to bring both variability and stability under one hat. In the end all three agree there is BOTH, but they differ in how they define stability (or variability for that matter) and its relationship to personality.

McCrae and Costa (1994) emphasize the perspective of temporal stability. They argue that there is little change in people's relative standings on broad trait categories and global tendencies across time. Despite their main emphasis on aggregating behavior across situations to show stability, they do at the same time allow, however, that traits are not completely "repetitive habits," but that they at times also interact with opportunities of the moment. In contrast, Mischel, Shoda, and Mendoza-Denton's (2002) primary focus is on consistent situationally-defined personality signatures. In their view, the most meaningful consistency is found in stable patterns of how individuals respond to

situations they interpret to be psychologically similar. This view depends on understanding the construal of the situation by the person who experiences it, and stability is seen in interpretable patterns of variability. In the most recent paper, Fleeson (2004) provides further evidence for the current consensus that both viewpoints are necessary for a full understanding of personality. His research shows that within-person variability around a central point of a personality trait is very high from situation to situation, but that individuals nonetheless maintain their relative position of central points compared to others from one time period to another. Thus, together these papers lead to the conclusion that personality is most usefully conceived of as a distribution of behaviors that can be described by both average tendencies (traits), as well as psychological processes involving characteristic responses to situations.

All papers in the remainder of this volume were chosen because they portray such a contextualized and dynamic view of personality—although they do this to a more or lesser degree. That is, enduring individual differences are the result of how person variables interact with the situational context to influence behavior. In this vein, papers were included if they make reference to psychological processes and mechanisms that result from or give rise to individual differences (or at least have the potential to). This link to individual differences is sometimes made explicitly, other times it is merely implied. Moreover, we care not only about current instantiations of these patterns, but also about how they came about and how they evolve over time. Thus, papers that address developmental processes (whether explicitly or implicitly) are included across different sections. The articles are organized into five sections, beginning with the section on stability we have already introduced.

The second section addresses individual differences in psychobiological systems, as well as genetic factors that contribute to or interact with personality characteristics. At this level, the main focus has been on specifying how the biological and genetic factors interact with the social environment in shaping who we are. The third section deals with intrapersonal processes in personality. Social processes are not universal, as they depend on the encodings of individuals. As such, this section includes papers that examine the cognitive, affective, and self-evaluatory processes that underlie social behavior. The fourth section then presents the other side of this coin, in that its focus is on the interpersonal context in which the intrapersonal processes are enacted. These papers show that personality processes vary meaningfully in relation with important longer-term social relationships. It should be noted that while we have created two separate sections, the boundaries between the intraand interpersonal processes are fuzzy and fluid, as there is a continuous and virtually seamless interchange between the two. Thus, assignment of papers to each of these sections is somewhat arbitrary. The fifth and final section looks at the link between personality and well-being. In the end, work on personality is most exciting when it has relevance to how people live and experience their lives. Thus, understanding the adaptive and maladaptive contributions of personality is of utmost importance.

### The Stability of Personality: Observations and Evaluations

Robert R. McCrae and Paul T. Costa, Jr.

"There is an optical illusion about every person we meet," Ralph Waldo Emerson wrote in his essay on "Experience":

In truth, they are all creatures of given temperament, which will appear in a given character, whose boundaries they will never pass: but we look at them, they seem alive, and we presume there is impulse in them. In the moment it seems impulse; in the year, in the lifetime, it turns out to be a certain uniform tune which the revolving barrel of the music-box must plav.<sup>1</sup>

In this brief passage, Emerson anticipated modern findings about the stability of personality and pointed out an illusion to which both laypersons and psychologists are prone. He was also perhaps the first to decry personality stability as the enemy of freedom, creativity, and growth, objecting that "temperament puts all divinity to rout." In this article, we summarize evidence in support of Emerson's observations but offer arguments against his evaluation of them.<sup>2</sup>

### EVIDENCE FOR THE STABILITY OF ADULT PERSONALITY

Emerson used the term *temperament* to refer to the basic tendencies of the individual, dispositions that we call *personality traits*. It is these traits, measured by such instruments as the Minnesota Multiphasic Personality Inventory and the NEO Personality Inventory, that have been investigated in a score of longitudinal studies over the past 20 years. Despite a wide variety of samples, instruments, and designs, the results of these studies have been remarkably consistent, and they are easily summarized.

1. The mean levels of personality traits change with development, but reach final adult levels at about age 30. Between 20 and 30, both men and women become somewhat less emotional and thrill-seeking and somewhat more cooperative and self-disciplined—changes we might interpret as evidence of increased maturity. After age 30, there are few and subtle changes, of which the most consistent is a small decline in activity level with advancing age. Except among individuals with dementia, stereotypes that depict older people as being withdrawn, depressed, or rigid are unfounded.

Robert R. McCrae is Research Psychologist and Paul T. Costa, Jr., is Chief, Laboratory of Personality and Cognition, both at the Gerontology Research Center, National Institute on Aging, National Institutes of Health. Address correspondence to Robert R. McCrae, Personality, Stress and Coping Section, Gerontology Research Center, 4940 Eastern Ave., Baltimore, MD 21224.

2. Individual differences in personality traits, which show at least some continuity from early childhood on, are also essentially fixed by age 30. Stability coefficients (test-retest correlations over substantial time intervals) are typically in the range of .60 to .80, even over intervals of as long as 30 years, although there is some decline in magnitude with increasing retest interval. Given that most personality scales have short-term retest reliabilities in the range from .70 to .90, it is clear that by far the greatest part of the reliable variance (i.e., variance not due to measurement error) in personality traits is stable.

3. Stability appears to characterize all five of the major domains of personality—neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. This finding suggests that an adult's personality profile as a whole will change little over time, and studies of the stability of configural measures of personality support that view.

4. Generalizations about stability apply to virtually everyone. Men and women, healthy and sick people, blacks and whites all show the same pattern. When asked, most adults will say that their personality has not changed much in adulthood, but even those who claim to have had major changes show little objective evidence of change on repeated administrations of personality questionnaires. Important exceptions to this generalization include people suffering from dementia and certain categories of psychiatric patients who respond to therapy, but no moderators of stability among healthy adults have yet been identified.<sup>3</sup>

When researchers first began to publish these conclusions, they were greeted with considerable skepticism—"I distrust the facts and the inferences" Emerson had written—and many studies were designed to test alternative hypotheses. For example, some researchers contended that consistent responses to personality questionnaires were due to memory of past responses, but retrospective studies showed that people could not accurately recall how they had previously responded even when instructed to do so. Other researchers argued that temporal consistency in self-reports merely meant that individuals had a fixed idea of themselves, a crystallized self-concept that failed to keep pace with real changes in personality. But studies using spouse and peer raters showed equally high levels of stability.<sup>4</sup>

The general conclusion that personality traits are stable is now widely accepted. Some researchers continue to look for change in special circumstances and populations; some attempt to account for stability by examining genetic and environmental influences on personality. Finally, others take the view that there is much more to personality than traits, and seek to trace the adult developmental course of personality perceptions or identity formation or life narratives.

These latter studies are worthwhile, because people undoubtedly do change across the life span. Marriages end in divorce, professional careers are started in mid-life, fashions and attitudes change with the times. Yet often the same traits can be seen in new guises: Intellectual curiosity merely shifts from one field to another, avid gardening replaces avid tennis, one abusive relationship is

followed by another. Many of these changes are best regarded as variations on the "uniform tune" played by individuals' enduring dispositions.

### ILLUSORY ATTRIBUTIONS IN TEMPORAL PERSPECTIVE

Social and personality psychologists have debated for some time the accuracy of attributions of the causes of behavior to persons or situations. The "optical illusion" in person perception that Emerson pointed to was somewhat different. He felt that people attribute behavior to the live and spontaneous person who freely creates responses to the situation, when in fact behavior reveals only the mechanical operation of lifeless and static temperament. We may (and we will!) take exception to this disparaging, if common, view of traits, but we must first concur with the basic observation that personality processes often appear different when viewed in longitudinal perspective: "The years teach much which the days never know."

Consider happiness. If one asks individuals why they are happy or unhappy, they are almost certain to point to environmental circumstances of the moment: a rewarding job, a difficult relationship, a threat to health, a new car. It would seem that levels of happiness ought to mirror quality of life, and that changes in circumstances would result in changes in subjective well-being. It would be easy to demonstrate this pattern in a controlled laboratory experiment: Give subjects \$1,000 each and ask how they feel!

But survey researchers who have measured the objective quality of life by such indicators as wealth, education, and health find precious little association with subjective wellbeing, and longitudinal researchers have found surprising stability in individual differences in happiness, even among people whose life circumstances have changed markedly. The explanation is simple: People adapt to their circumstances rapidly, getting used to the bad and taking for granted the good. In the long run, happiness is largely a matter of enduring personality traits: "Temper prevails over everything of time, place, and condition, and . . . fix[es] the measure of activity and of enjoyment."

A few years ago, William Swann and Craig Hill provided an ingenious demonstration of the errors to which too narrow a temporal perspective can lead. A number of experiments had shown that it was relatively easy to induce changes in the self-concept by providing self-discrepant feedback. Introverts told that they were really extraverts rated themselves higher in extraversion than they had before. Such studies supported the view that the self-concept is highly malleable, a mirror of the evaluation of the immediate environment.

Swann and Hill replicated this finding, but extended it by inviting subjects back a few days later. By that time, the effects of the manipulation had disappeared, and subjects had returned to their initial self-concepts. The implication is that any one-shot experiment may give a seriously misleading view of personality processes.<sup>6</sup>

The relations between coping and adaptation provide a final example. Cross-sectional studies show that individuals who use such coping mechanisms as self-blame, wishful thinking, and hostile reactions toward other people score

lower on measures of well-being than people who do not use these mechanisms. It would be easy to infer that these coping mechanisms detract from adaptation, and in fact the very people who use them admit that they are ineffective. But the correlations vanish when the effects of prior neuroticism scores are removed; an alternative interpretation of the data is thus that individuals who score high on this personality factor use poor coping strategies and also have low well-being: The association between coping and well-being may be entirely attributable to this third variable.<sup>7</sup>

Psychologists have long been aware of the problems of inferring causes from correlational data, but they have not recognized the pervasiveness of the bias that Emerson warned about. People tend to understand behavior and experience as the result of the immediate context, whether intrapsychic or environmental. Only by looking over time can one see the persistent effects of personality traits.

### THE EVALUATION OF STABILITY

If few findings in psychology are more robust than the stability of personality, even fewer are more unpopular. Gerontologists often see stability as an affront to their commitment to continuing adult development; psychotherapists sometimes view it as an alarming challenge to their ability to help patients; humanistic psychologists and transcendental philosophers think it degrades human nature. A popular account in *The Idaho Statesman* ran under the disheartening headline "Your Personality—You're Stuck With It."

In our view, these evaluations are based on misunderstandings: At worst, stability is a mixed blessing. Those individuals who are anxious, quarrelsome, and lazy might be understandably distressed to think that they are likely to stay that way, but surely those who are imaginative, affectionate, and carefree at age 30 should be glad to hear that they will probably be imaginative, affectionate, and carefree at age 90.

Because personality is stable, life is to some extent predictable. People can make vocational and retirement choices with some confidence that their current interests and enthusiasms will not desert them. They can choose friends and mates with whom they are likely to remain compatible. They can vote on the basis of candidates' records, with some assurance that future policies will resemble past ones. They can learn which co-workers they can depend on, and which they cannot. The personal and social utility of personality stability is enormous.

But it is precisely this predictability that so offends many critics. ("I had fancied that the value of life lay in its inscrutable possibilities," Emerson complained.) These critics view traits as mechanical and static habits and believe that the stability of personality traits dooms human beings to lifeless monotony as puppets controlled by inexorable forces. This is a misunderstanding on several levels.

First, personality traits are not repetitive habits, but inherently dynamic dispositions that interact with the opportunities and challenges of the moment. Antagonistic people do not yell at everyone; some people they flatter, some they scorn, some they threaten. Just as the same intelligence is applied to a lifetime of changing problems, so the same personality traits can be expressed in an infinite variety of ways, each suited to the situation.

Second, there are such things as spontaneity and impulse in human life, but they are stable traits. Individuals who are open to experience actively seek out new places to go, provocative ideas to ponder, and exotic sights, sounds, and tastes to experience. Extraverts show a different kind of spontaneity, making friends, seeking thrills, and jumping at every chance to have a good time, People who are introverted and closed to experience have more measured and monotonous lives, but this is the kind of life they choose.

Finally, personality traits are not inexorable forces that control our fate, nor are they, in psychodynamic language, ego alien. Our traits characterize us; they are our very selves; 10 we act most freely when we express our enduring dispositions. Individuals sometimes fight against their own tendencies, trying perhaps to overcome shyness or curb a bad temper. But most people acknowledge even these failings as their own, and it is well that they do. A person's recognition of the inevitability of his or her one and only personality is a large part of what Erik Erikson called *ego integrity*, the culminating wisdom of a lifetime.

### Notes

1. All quotations are from "Experience," in Essays: First and Second Series, R.W. Emerson (Vintage, New York, 1990) (original work published 1844).

2. For recent and sometimes divergent treatments of this topic, see R. R. McCrae and P.T. Costa, Jr., *Personality in Adulthood* (Guilford, New York, 1990); D.C. Funder, R.D. Parke, C. Tomlinson-Keasey, and K. Widaman, Eds., *Studying Lives Through Time: Personality and Development* (American Psychological Association, Washington, DC, 1993); T. Heatherton and J. Weinberger, *Can Personality Change?* (American Psychological Association, Washington, DC, 1994).

3. I.C. Siegler, K.A. Welsh, D.V. Dawson, G.G. Fillenbaum, N.L. Earl, E.B. Kaplan, and C.M. Clark, Ratings of personality change in patients being evaluated for memory disorders, *Alzheimer Disease and Associated Disorders*, 5, 240–250 (1991); R.M.A. Hirschfeld, G.L. Klerman, P. Clayton, M.B. Keller, P. McDonald-Scott, and B. Larkin, Assessing personality: Effects of depressive state on trait measurement, *American Journal of Psychiatry*, 140, 695–699 (1983): R.R. McCrae, Moderated analyses of longitudinal personality stability, *Journal of Personality and Social Psychology*, 65, 577–585 (1993).

4. D. Woodruff, The role of memory in personality continuity: A 25 year follow-up, *Experimental Aging Research*, 9, 31–34 (1983): P.T. Costa, Jr.. and R.R. McCrae, Trait psychology comes of age, in *Nebraska Symposium on Motivation: Psychology and Aging*, T.B. Sonderegger. Ed. (University of Nebraska Press, Lincoln. 1992).

5. P.T. Costa, Jr., and R. R. McCrae, Influence of extraversion and neuroticism on subjective wellbeing: Happy and unhappy people, *Journal of Personality and Social Psychology*, 38, 668–678 (1980).

6. The study is summarized in W.B. Swann, Jr., and C.A. Hill, When our identities are mistaken: Reaffirming self-conceptions through social interactions, *Journal of Personality and Social Psychology*, 43, 59–66 (1982). Dangers of single-occasion research are also discussed in J.R. Council, Context effects in personality research, *Current Directions in Psychological Science*, 2, 31–34 (1993).

7. R.R. McCrae and P.T. Costa, Jr., Personality coping, and coping effectiveness in an adult sample. *Journal of Personality*, 54, 385–405 (1986).

8. Observations in nonpatient samples show what happens over time under typical life circumstances; they do not rule out the possibility that psychotherapeutic interventions can change personality. Whether or not such change is possible, in practice much

of psychotherapy consists of helping people learn to live with their limitations, and this may be a more realistic goal than "cure" for many patients. See P.T. Costa, Ir., and R.R. McCrae, Personality stability and its implications for clinical psychology, Clinical Psychology Review, 6, 407-423 (1986).

9. A. Tellegen, Personality traits: Issues of definition, evidence and assessment, in Thinking Clearly About Psychology: Essays in Honor of Paul F. Meehl, Vol. 2, W. Grove

and D. Cicchetti, Eds. (University of Minnesota Press, Minneapolis, 1991).

10. R.R. McCrae and P.T. Costa, Ir., Age, personality, and the spontaneous self-concept, Journals of Gerontology: Social Sciences, 43, S177-S185 (1988).

## Situation-Behavior Profiles as a Locus of Consistency in Personality

Walter Mischel, Yuichi Shoda, and Rodolfo Mendoza-Denton Psychology Department, Columbia University, New York, New York (W.M., R.M.-D.), and Psychology Department, University of Washington, Seattle, Washington (Y.S.)

#### Abstract

Traditional approaches have long considered situations as "noise" or "error" that obscures the consistency of personality and its invariance. Therefore, it has been customary to average the individual's behavior on any given dimension (e.g., conscientiousness) across different situations. Contradicting this assumption and practice, recent studies have demonstrated that by incorporating the situation into the search for consistency, a new locus of stability is found. Namely, people are characterized not only by stable individual differences in their overall levels of behavior, but also by distinctive and stable patterns of situation-behavior relations (e.g., she does *X* when *A* but *Y* when *B*). These *if* . . . *then* . . . *profiles* constitute behavioral "signatures" that provide potential windows into the individual's underlying dynamics. Processing models that can account for such signatures provide a new route for studying personality types in terms of their shared dynamics and characteristic defining profiles.

### Keywords

personality; consistency; interactionism; if . . . then . . . profiles

Traditionally, personality psychology has been devoted to understanding the dispositional characteristics of the person that remain invariant across contexts and situations. Further, it has been assumed that the manifestations of invariance in personality should be seen in consistent differences between individuals in their behavior across many different situations. For example, a person who is high in conscientiousness should be more conscientious than most people in many different kinds of situations (at home, at school, with a boss, with friends). The data over the course of a century, however, made it increasingly evident that the individual's behavior on any dimension varies considerably across different types of situations, thus greatly limiting the ability to make situation-specific predictions and raising deep questions about the nature and locus of consistency in personality (Mischel, 1968; Mischel & Peake, 1982).

By the 1970s, the discrepancy between the data and the field's fundamental assumptions precipitated a paradigm crisis (Bem & Allen, 1974). The crux of this crisis was captured in the so-called personality paradox: How can our intuitions about the stability of personality be reconciled with the evidence for its variability across situations? A long-term research program was launched to try to resolve this paradox (Mischel & Peake, 1982; Mischel & Shoda, 1995). This program was motivated by the proposition that the variability of behavior across situations, at least partly, may be a meaningful expression of the enduring but dynamic personality system itself and its stable underlying organization. The findings that emerged have led to a reconceptualization of the nature and locus

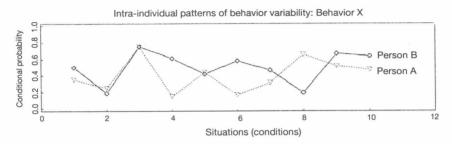
of personality invariance, reconciling the variability of behavior on the one hand with the stability of the personality structure on the other.

### EVIDENCE FOR THE CONTEXTUALIZED IF ... THEN ... EXPRESSION OF PERSONALITY INVARIANCE

Figure 1 shows behavioral data that are typical of those found for any two individuals in a given domain of behavior across many different situations. In traditional conceptions, the variability in an individual's behavior across situations (the ups and downs along the y-axis) is seen as unwanted, uninformative variance reflecting either situational influences or measurement error. In dealing with this variability, the most widely accepted approach has been to aggregate the individual's behavior on a given dimension across many situations to arrive at the person's "true score." The average summary score that results allows one to ask whether individuals are different in their overall level of a disposition, and is useful for many purposes—yet it may conceal potentially valuable information about where and when individuals differ in their unique patterns of behavior. If these patterns of situation-behavior relations are indeed stable and meaningful, rather than just measurement error, they may be thought of as  $if \ldots then \ldots$  (if situation A, then the person does X, but if situation B, then the person does Y) "signatures" that contain clues about the underlying personality system that produces them.

In a study testing for the stability and meaningfulness of such situation-behavior profiles, the behavior of children was observed *in vivo* over the course of a summer within a residential camp setting (Shoda, Mischel, & Wright, 1994). The data collection yielded an extensive archival database that allowed systematic analyses of coherence in behavior as it unfolded across naturalistic situations and over many occasions, under unusually well-controlled research conditions that ensured the reliability and density of measurement.

In selecting situations for the analysis, it was important to move beyond the nominal situations specific to any given setting (such as the woodworking room, dining hall, or playground) that would necessarily be of limited generalizability and usefulness outside the specific setting. Rather, the relevant psychological features of situations—the "active ingredients" that exert a significant impact on the behavior of the person and that cut across nominal settings—were iden-



**Fig. 1.** Typical individual differences in the conditional probability of a type of behavior in different situations. Reprinted by permission from Mischel and Shoda (1995, Fig. 1, p. 247).

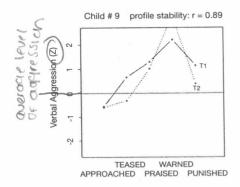
tified. Within this camp setting, five types of psychological situations that could be objectively recorded emerged: three negative situations ("teased, provoked, or threatened by peer," "warned by adult," and "punished by adult") and two positive situations ("praised by adult" and "approached socially by peer"). The children's social behavior (e.g., verbal aggression, withdrawal, friendly behavior, prosocial behavior) was unobtrusively observed and recorded as it occurred in relation to each of the selected interpersonal situations, with an average of 167 hr of observation per child over the course of the 6-week camp.

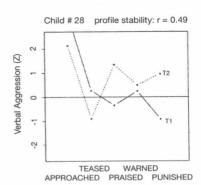
With this unusually extensive data archive, it was possible to assess the stability of the hypothesized situation-behavior relationships for each person. Figure 2 shows illustrative profiles for two children's verbally aggressive behavior across the five types of situations. The frequencies of behavior were first standardized, so that the remaining intraindividual variance in the profiles reflects behavior above and beyond what would be normally expected in the situation indicated—and is thus attributable to the individual's distinctive personal qualities. The two lines within each panel indicate the profiles based on two separate, nonoverlapping samples of situations.

As the figure shows, compared with the other children at the camp, Child 9 showed a distinctively higher level of verbal aggression when warned by adults, but a lower-than-average level when approached positively by a peer. In contrast, Child 28 displayed higher levels of verbal aggression in comparison with others when approached positively by a peer, not when warned by an adult. In contrast to the prediction that intraindividual variability in behavior across situations reflects noise and should thus have an average stability of zero, the results provided strong evidence that participants' if . . . then . . . profiles were both distinctive and stable.

### THE PERSONALITY PARADOX RECONSIDERED

Further analyses tested the hypothesis that individuals' self-perceptions of consistency are related to the stability of their situation-behavior profiles (Mischel





**Fig. 2.** Illustrative *if . . . then* signatures of verbal aggression in relation to five situations in two time samples, Thand T2 (solid and dotted lines). Data for two children are shown in standardized scores (Z) relative to the normative levels of verbal aggression in each situation. The profile stability coefficients for the children are shown above the graphs. Reprinted by permission from Mischel and Shoda (1995, Fig. 2, p. 249).