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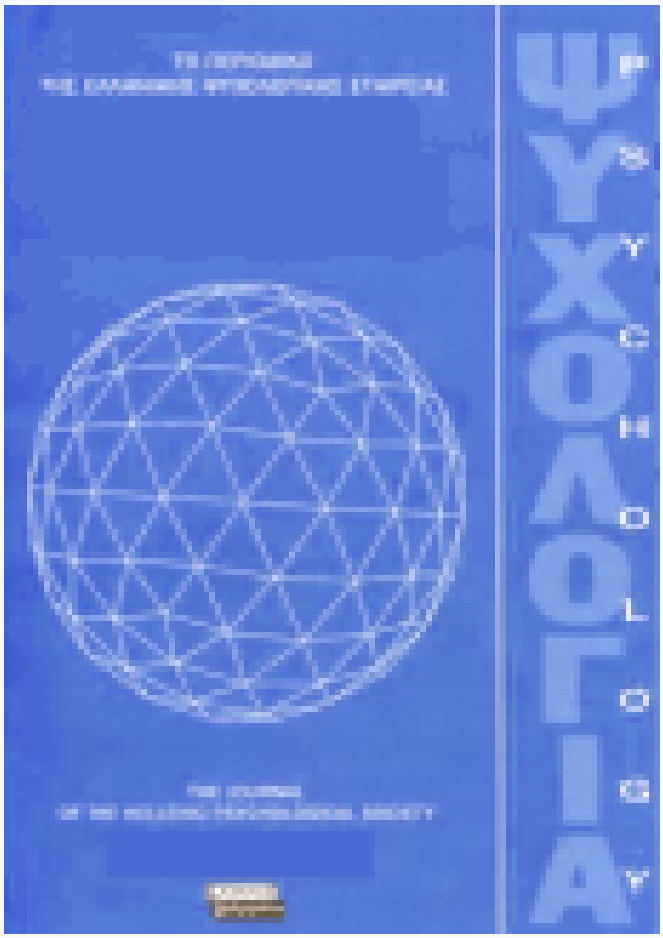

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Personality assessmet: Implications of a social-cognitive theory of personality

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ABSTRACT This paper outlines the implications of social-cognitive theory for personality assessment. Social-cognitive theory explains personality functioning in terms of a complex system of cognitive and affective processes that develop and function in interaction with the social environment. It also highlights self-reflective and self-regulatory processes that contribute to individual psychological development and functioning. This theoretical framework has significant implications for personality assessment. It implies that assessment should focus on underlying psychological mechanisms and their interrelations, rather than surface-level behavioral tendencies; on personal determinants of action; on the potentially unique cognitive contents that characterize the individual; and on the social contexts in which personality processes come into play. We illustrate the social-cognitive approach by reviewing three research programs that explore, respectively, cross-situational coherence in self-efficacy judgment (Cervone, 1997, 1999); self-knowledge, situational beliefs, self-efficacy judgment, and adaption among international exchange students (Jencius, 1999); and social-cognitive self-regulatory factors in smoking and smoking cessation (Shadel et al., 2000).

Key words: Personality assessment, Self-efficacy, Social-cognitive theory.

To assess personality, one must answer two basic questions: (a) What are the psychological qualities one needs to assess?, and (b) How can one assess them? Different theories of personality answer these questions differently. Psychodynamic theory, for example, posits that personality functioning rests upon unconscious structures and the dynamics of mental energy (Freud, 1923). This implies that assessments should target these mental structures and dynamics, and should do so in a manner that is sensitive to material that lies outside of consciousness. Trait approaches such as five-factor theory (McCrae & Costa, 1995, 1999) posit that personality consists of a small set of universal dispositional tendencies that are readily observable. This implies that the central assessment goal is to measure these surface-level tendencies, and that assessments can involve relatively simple self- or observer-reports.

The present paper explains the implications for personality assessment of social-cognitive theories of personality (reviewed in Cervone &

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Shoda, 1999b). Our goal is to explain how social-cognitive theory answers the above questions about the targets and methods of personality assessment. These answers can be seen to constitute a social-cognitive theory of personality assessment (also see Cervone, Shadel, & Jencius, 2001) that is, a theory about what is required for a thorough assessment of the psychological qualities that define the individual and distinguish individuals from one another.

We begin by reviewing the history and current status of the social-cognitive approach to personality. We then articulate the implications of social-cognitive theory for personality assessment. Finally, we illustrate the approach by describing three research programs of ours.

Social-cognitive theory: Origins and development

The origins of contemporary social-cognitive theories of personality can be traced to the 1960s (see Caprara & Cervone, 2000; Cervone & Shoda, 1999c). The social learning theory of Bandura and colleagues (Bandura & Walters, 1963) highlighted the diverse routes through which social experiences contribute to personality development. Bandura's research on modeling identified psychological processes through which these experiences give rise to enduring personal capabilities, and his analysis of cognitive mechanisms that mediate therapeutic behavioral change (Bandura, 1969) helped to launch the cognitive-behavioral movement that came to dominate much of clinical psychology.

The 1960s also witnessed Mischel's famed critique of trait and psychodynamic theories (1968). By calling for a personality theory that could speak to the interactions between persons and the social environment (Mischel, 1968) and by subsequently positing of a set of cognitive-social person variables designed to accomplish this task (Mischel, 1973), Mischel provided a second pillar in the construction of the contemporary social-cognitive perspective.

In the last quarter of the 20th century, the social-learning views of the 1960s evolved into a fully "cognitive" perspective on personality, that is, a perspective that places processes involving knowledge, beliefs, self-reflection, and meaning construction at the heart of personality functioning. Bandura's (1986) comprehensive social cognitive theory, for example, explained personality functioning in terms of basic cognitive capabilities that develop and function in reciprocal interaction with the social environment. His analysis of self-efficacy processes (Bandura, 1977, 1997), as well as work on personal goal-setting and self-regulation (Bandura & Cervone, 1983), highlighted the central importance of cognitions about the self.

A further development in cognitive analyses of personality came from experimental social psychology. Researchers identified enduring individual differences in the cognitive structures underlying judgment, affect, and action (e.g., Cantor & Kihlstrom, 1987; Higgins, King, & Mavin, 1982; Markus, 1977). Through these advances, social psychology research no longer stood opposed to work on personality. Instead, it enriched the study of personality and individual differences by elucidating basic social-cognitive mechanisms underlying dispositional tendencies (Baldwin, 1999; Grant & Dweck, 1999; Higgins, 1999; Zelli & Dodge, 1999).

A critical conceptual development in the 1990s was that social-cognitivists explicitly began to treat personality as a complex social-cognitive and affective *system* (Cervone, 1997; Mischel & Shoda, 1995, 1998). As with any complex system (see, e.g., Nowak & Vallacher, 1998), a key task was to understand not only the basic elements of the system but how these elements are coherently interconnected. The coherence of personality functioning came to be viewed as an emergent property of interactions among multiple interconnected psychological mechanisms (Cervone & Shoda, 1999b). A major implication of this view is that personality structure cannot be construed as a set of independent psychological entities (a construal implicit in theories that posit a set of independent trait

constructs while devoting little or no attention to how these factors interrelate). Instead, to understand the structure of personality one must understand how psychological mechanisms dynamically interact. By combining this systems view with a focus on self-referent processes, personality can be viewed as a complex "self-system" (Bandura, 1999) through which individuals contribute to their experiences and actions.

Social-cognitive theory: Implications for assessment

The most basic implication of this social-cognitive theory of personality for the question of psychological assessment is the following. Personality assessments should primarily target systems of cognitive and affective processes. The main assessment goal is to capture the constellations of social-cognitive and affective mechanisms that contribute to individuals' distinctive characteristics. This overarching theme contains five principles that, in total, comprise a social-cognitive theory of personality assessment (also see Cervone et al., 2000).

1) Assess underlying psychological processes, not surface-level dispositions. The first principle concerns the target of assessments. Personality assessments commonly tap overt tendencies, or what may be termed "phenotypic" or "surface-level" characteristics. One assesses tendencies to exhibit a certain type of behavior (e.g., conscientious or agreeable acts) or to experience a given psychological state (e.g., to experience anxiety or a preference for novelty). Such assessments have much value. Nonetheless, their contributions to basic personality theory are limited. A key limitation is that two people who share the same surface-level profile may differ at the level of underlying mechanisms. Different people may act the same way for different underlying reasons, that is, as a function of different underlying psychological or biological systems (cf. Kagan, 1994, 1998). Assessing overt tendencies, rather than underlying processes, may obscure these differences.

The social-cognitive theory of personality implies that personality assessments primarily should target psychological mechanisms underlying social behavior. The central goal of assessment is not to describe overt tendencies, but underlying cognitive and affective structures.

2) Assess personal determinants of action, not just dispositional tendencies. People are not inert beings who are merely predisposed to react in a particular way when confronted with a particular stimulus. People select, interpret, and prepare themselves for the situations they encounter. They thus causally contribute to the course of their development. Personality psychology, then, must address not only people's typical tendencies, but their potential to develop new capacities and qualities (Bandura, 1997; Caprara, 1999). Personality assessment, by implication, must include assessment of the beliefs, goals, and self-regulatory skills that contribute to personality development and adjustment over the course of time.

Recognizing this, social-cognitive theory devotes great attention to personal determinants of action. Much of this work in recent years has examined how self-development is shaped by self-efficacy appraisals, that is, people's appraisals of their capability for performance (Bandura, 1977). Self-efficacy assessments tap individuals' beliefs in their capacity to manage the important psychosocial challenges that make up their day-to-day life (e.g., Pastorelli et al., 1999). People with a robust sense of efficacy are found to be more likely to attempt challenging endeavors, to remain calm during task performance, and to persist in their efforts in the face of setbacks (reviewed in Bandura, 1997; Cervone, 2000; Cervone & Scott, 1995). Importantly, assessments of self-efficacy commonly are a better predictor of future performance than are measures of past performance (Bandura, 1997). People's self-reflections on their past experiences exert a unique determinative influence on their future action. Assessing

merely what people tended to "be like" in the past – i.e., their past dispositions – thus may be less informative than assessing a personal determinant of action, namely, perceived self-efficacy.

This point is illustrated in longitudinal research evaluating the impact of self-efficacy perceptions on adolescent development (Caprara, Barbaranelli, Pastorelli, & Cervone, 2000). In this work, adolescents' beliefs in efficacy to resist peer pressure to engage in risky social behavior predicted problem behavior and school achievement two years later. Even after statistically controlling for initial levels of problem behavior and achievement, adolescents with a higher sense of self-efficacy experienced fewer psychosocial problems and attained higher grades over the course of time (also see Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

3) Employ assessments that are sensitive to the qualities of the unique individual. Although personality psychologists devote much effort to the assessment of individual differences, ultimately personality psychology must address the psychological qualities of the individual person. Assessing individual differences cannot substitute for assessing individuals, as many theorists have explained (e.g., Block, 1995; Lamiell, 1997; Rorer, 1990). To capture an individual's personality, one must address the question of coherent, within-person patterns among psychological variables (e.g., Magnusson, 1988; Magnusson & Stattin, 1998).

The within-person organization of personality structures may be unique to the individual. This uniqueness implies that at least some elements of psychological assessment need to be conducted idiographically. One way of sorting through the issues involved in deciding between idiographic and nomothetic techniques is to distinguish between psychological *processes* and *content*. Many psychological processes may function similarly across individuals, and thus can be understood nomothetically. For example, all people may assign meaning to ambiguous social events by drawing upon salient pre-existing knowledge, or salient cognitive constructs. Nonetheless, the cognitive content that comes into play in personality functioning may be highly idiosyncratic. Returning to our example, people may assign meaning to events by drawing upon relatively unique sets of constructs (Higgins et al., 1982; also see Cervone, 1997, 1999; Higgins, 1990, 1999). One thus may need to assess psychological content idiographically, as we illustrate in the research programs reviewed below.

It is important to recognize, however, that social-cognitive theory does not imply that all personality assessment must be idiographic. Investigators commonly are interested in understanding a particular population of individuals in a particular domain of functioning. In many circumstances, one may reasonably assume that all individuals in the population share beliefs about the domain under study. Under this assumption, one may quite appropriately construct nomothetic assessment devices. For example, research on the role of perceived self-efficacy in academic achievement (e.g., Bandura et al., 1996; Pastorelli et al., 1999) examines a population of children who possess a common understanding of academic tasks, school grades, etc. Researchers thus can develop nomothetic instruments to assess individual differences in perceived self-efficacy within this domain. A second point that moves one away from a purely idiographic perspective is that subsets of people may share a constellation of social-cognitive variables and an associated pattern of behavior. Investigators thus may seek to identify classes of individuals who are substantially alike in these ways, rather than treating each individual uniquely (Vansteelandt & Mechelen, 1998, 1999).

4) To assess personality, one should assess persons-in-context. Social-cognitive theories are defined by the units of analysis through which they conceptualize personality functioning. Personality is understood by reference to basic cognitive and affective mechanisms. These psychological structures and processes have social foundations (Baltes & Staudinger, 1996; Bandura, 1986; Levine, Resnick, & Higgins, 1993); that is, they develop

in, and inherently pertain to, the sociocultural contexts in which people live their lives. People's social skills, beliefs, values, and goals reflect the settings in which they have lived. The implication, then, is that personality assessment cannot be divorced from these social settings.

An additional consideration that motivates a contextual approach to personality assessment is that social contexts activate personality processes. Situational features activate different aspects of self-concept (Markus & Wurf, 1987) and differentially engage self-referent processes through which people regulate their behavior (Cervone, Jiwani, & Wood, 1991; Cervone & Wood, 1995). Different circumstances may activate different personality structures and processes for different people. A key assessment task, then, is to map the potentially idiosyncratic ways in which situational features activate personality processes for the individual.

Context-based assessments also are important for capturing how an individual's actions vary from one context to another. The work of Mischel and Shoda (1995, 1998; Mischel, 1999; Shoda, 1999, 2000) and Vansteelandt and Meechelen (1998, 1999) vividly illustrates that such situation-to-situation variability is a stable "signature of personality." Variability in action, in other words, is not statistical error, but a valuable piece of information about the individual.

5) Keep separate response systems separate. A common practice in personality assessment is to treat measures of diverse response systems as alternative indicators of a personality construct. If one is studying anxiety, for example, self-reports of emotional states, physiological indices of arousal, and behavioral indices of approach versus avoidance tendencies may (if they intercorrelate significantly) be combined into an overall index of anxiety.

The drawback of such aggregation is that it forestalls questions about the possible functional relations among systems. In the case of anxiety, it might be that behavioral avoidance and physiological arousal are functionally related, with arousal causally influencing performance. Alternatively, both behavior and physiological arousal may be determined primarily by the self-referent beliefs tapped by the self-reports. These and other possibilities can only be explored if "response classes [are] given independent conceptual statuses from one another and analyzed separately" (Bem, 1972, p. 54).

The social-cognitive theory of personality is centrally concerned with the functional relations among affect and physiological arousal, cognition, and action. The implication for assessment, then, is that one should not combine measures of these systems into a global index, but instead should treat these measures as conceptually distinct. Doing so enables one to explore the ways in which the systems influence one another. Research on perceived self-efficacy and anxiety (e.g., Bandura, Reese, & Adams, 1982) is one of many potential illustrations of this principle. Self-referent beliefs, avoidant behavior, and anxious arousal are not treated as alternative indicators of a global construct. Instead, personal beliefs, action, and physiological arousal are conceptually distinct. Research findings demonstrate that belief systems causally contribute to both arousal and action.

These five social-cognitive principles of assessment rest upon a broader theoretical conception of the alternative strategies through which one might explain how personal qualities contribute to individual experience and action, to which we now turn.

Top-down and bottom-up explanatory strategies

The goal of a personality theory, as with any theory in the sciences, is to provide an explanation of its central phenomenon. This obvious point has a significant implication for the question of psychological assessment. Philosophers have long recognized that there exist alternative strategies for explaining phenomena. Different strategies of explanation suggest different strategies of personalty assessment.

A key distinction is that between "top-down" and "bottom-up" strategies of scientific explanation (Cervone, 1999; Kitcher, 1985; Salmon, 1989; Wylie, 1995). In brief, top-down explanations are ones in which investigators try to formulate a small set of principles that might organize a diverse set of information (Kitcher, 1985). The principles might involve universal laws or an overarching categorical or dimensional taxonomy. Individual cases are explained by fitting them within this overarching organizational framework. The individual case, then, is simply seen as a "low level" exemplar of a "high level" principle or taxonomic group. In personality psychology, the five-factor model (McCrae & Costa, 1996) illustrates the top-down strategy. A small set of high-level personality constructs organize a diversity of lower-level dispositional tendencies. The personality functioning of the individual is explained by fitting him or her within the generic high-level system. The five-factor model embodies another key feature of top-down approaches, namely, that a high-level explanatory system can be formulated in relative ignorance of underlying causal processes (see John, 1990).

In contrast, bottom-up strategies of explanation seek to uncover "the underlying mechanisms ... that produce the phenomena we want to explain" (Salmon, 1989, p. 134). The goal is not to formulate overarching principles that correspond to general trends in data. Instead, one seeks specific underlying mechanisms that actually come into play in particular instances. Investigators strive to identify "the internal workings...the hidden mechanisms" (Salmon, 1989, p. 134) that give rise to observed phenomena. The behavior of the individual case is not explained by fitting the case into a generic high-level scheme, but by identifying the causal processes underlying the potentially idiosyncratic behavior of that individual case.

In personality psychology, social-cognitive theory is a prototype case of bottom-up explanation. Social-cognitive theory does not seek to explain the individual's personality functioning by fitting the individual into a system of high-level individual-difference categories. Instead, the social-cognitivist seeks to understand the underlying psychological mechanisms that give rise to the coherent, distinctive aspects of the individual's psychological experience and action. Personality functioning is not explained in terms of high-level, taxonomic individual-difference variables, but in terms of interconnections among an underlying system of social-cognitive and affective processes. An analysis of this social-cognitive and affective system should enable one not only to account for average, aggregated dispositional tendencies, but for the unique patterns of response exhibited by potentially unique individuals (Cervone, 1997, 1999; also see Shadel, Niaura, & Abrams, 2000; Shoda, 1999; Zelli & Dodge, 1999).

The implication for assessment is the following. If – explicitly or implicitly – one embraces a top-down explanatory scheme, one's assessment goals are to develop reliable measures of the high-level personality variables that comprise the top-down system. This goal of assessing high-level dispositional variables that comprise an overarching taxonomy of persons has dominated research on personality assessment since the early efforts of Cattell (1946) and Eysenck (1959). In contrast, a bottom-up approach to explanation dictates different assessment goals. If one explains personality functioning in terms of a set of underlying psychological mechanisms whose specific content and whose interconnections may be unique to the individual, then one should assess these mechanisms in a manner that is sensitive to their potentially unique content and interconnections. Further, one should explore the ways in which this personality system contributes to significant aspects of the individual's psychological functioning. That is the goal of three research programs that we now describe.

Illustrative research: Assessing systems of self- and situational knowledge

Numerous research programs, in personality

psychology and elsewhere in the field, illustrate one or more of the social-cognitive principles of personality assessment that we have outlined (see Caprara & Cervone, 2000). Here, we briefly describe recent research of ours that illustrates some of the principles, and advantages, of social-cognitive theory.

One line of research has explored the classic question of cross-situational coherence in psychological response (Cervone, 1997, 1999). This problem typically has been addressed through top-down dispositional strategies. Investigators have gauged the degree to which populations of individuals behave consistently with respect to high-level trait constructs (Mischel, 1968). Although there have been significant, novel advances in this approach (e.g., Bem & Allen, 1974; Epstein, 1979; Jackson & Paunonen, 1985), research generally has shed little light on psychological mechanisms that causally contribute to cross-situational coherence in response. In contrast, we adopt a bottom-up social-cognitive approach whose fundamental goal is to assess a system of psychological mechanisms that contribute to personality coherence. We explore how both self-knowledge and situational beliefs contribute to cross-situational coherence in perceived self-efficacy (Cervone, 1997, 1999); we focus on self-efficacy appraisals because they, in turn, causally contribute to behavioral and affective tendencies (Bandura, 1997).

Theoretically, we posit that two factors contribute to cross-situational coherence in self-efficacy appraisals: (a) self-schemas (Markus, 1977) that come to mind in diverse contexts and contribute to the formation of domain-specific self-efficacy judgments, and (b) situational beliefs, specifically, people's beliefs about the relation between schematic personal attributes and everyday social settings. The assessment task, then, is to assess self-schemas, situational beliefs, and self-efficacy appraisals in a manner that is sensitive to the unique qualities of the individual. To assess self-schemas, participants write essays describing their personal strengths and personal weaknesses; the open-ended nature of this task enables one to detect idiosyncratic beliefs about the self. Situational beliefs are assessed via a categorization task in which participants rate the relevance of each of 81 common circumstances to their most important personal characteristics; this assessment enables us to detect potentially unique beliefs about social settings and their relation to personal attributes. Finally, participants complete a multi-domain self-efficacy questionnaire in which they rate their confidence in performing specific behaviors in concrete, well-specified situations. The situational descriptors from the categorization task are embedded in the self-efficacy items, which enables us to identify clusters of schema-relevant situations across which people are predicted to have high and low levels of self-efficacy.

Two findings are of note. First, we are able to identify significant patterns of cross-situational coherence (Cervone, 1997, 1999). People feel significantly more (less) efficacious across sets of situations that they see as relevant to their personal strengths (weaknesses). Second, the patterns of cross-situational coherence uncovered through these social-cognitive assessments often violate the structure of traditional dispositional categories. Individuals commonly link personal beliefs to a set of situations that is idiosyncratic. Cross-situational coherence, then, is identified across sets of circumstances that form a meaningful "equivalence class" (Bem, 1983) for the particular individual, even though they may not be a meaningful class of situations for individuals in general. For example, one of our participants (Figure 1) saw herself as "determined." She linked this schematic personal characteristic to a set of achievement and interpersonal circumstances that included fragments of traditional dispositional categories. The social-cognitive assessment strategy that revealed these links, then, uncovered patterns of cross-situational coherence that might have been missed in a traditional individual-differences approach (also see Cervone & Shoda, 1999a).

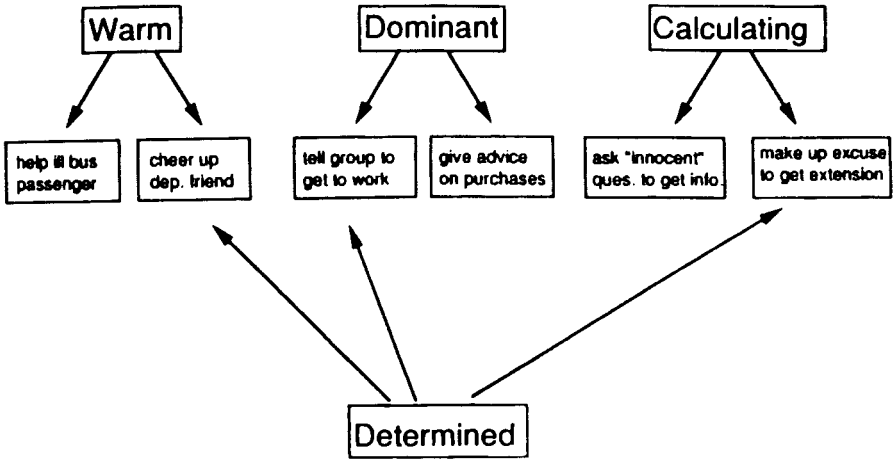

Figure 1
Analyses of one participant from dataset of Cervone (1997, 1999).

Note: The figure displays one of the individual's schematic personal attributes ("determined") and some circumstances that she judged relevant (indicated by arrows from "determined") and not relevant to this attribute. The figure also illustrates how these circumstances might typically be grouped together in a nomothetic analysis of individual-difference constructs.

Conceptually related research by Jencius (1999) explores personality factors that influence the social adaptation of international exchange students living abroad. These students face a multiplicity of novel social, interpersonal, and intellectual challenges that constitute a significant "life transition" (Sanderson & Cantor, 1999). Such transitions are particularly valuable contexts for studying individual differences in social-cognitive structures that contribute to coping and adaptation. The participants in this research, U.S. international exchange students living in Austria, participate in a series of assessment sessions in which they (a) enumerate schematic personal strengths and weaknesses in open-ended essays; (b) categorize the relevance of each of a large number of everyday social situations to their most salient strengths and weaknesses, and (c) complete a multidomain self-efficacy questionnaire containing items tailored to the challenging circumstances faced by the exchange student. The overall goal of these assessments is to identify the potentially idiosyncratic systems of personal and situational beliefs that may give rise to coherence patterns of high and low self-efficacy appraisals.

A striking feature of this assessment procedure is the idiosyncrasy of the personal belief systems that it reveals. For example, consider two participants (numbers 10 and 18 in the data collection procedure), both of whom described themselves as being "adaptive." No fixed, nomothetic definition of "adaptiveness" could capture their cognitive personality structure. Instead, the bottom-up, idiographic procedure revealed that these individuals held very unique, idiosyncratic beliefs about the attribute. They agreed with respect to some of the attributed defining characteristics (e.g., "Avoid saying anything critical about the new country"), but disagreed on many others. Indeed, they each identified clusters of circumstances (e.g., "Learn the values of the new

country and the natives," "Try to act and look more like the natives," for Participant 18; "Date a native," "Make friends with natives," for Participant 10) that they, but not their "adaptive" counterpart, thought was relevant to the characteristic. Of particular interest is the finding that the behavior "Learn the language" was not judged as relevant to "adaptive" by either participant, even though this item surely might appear on a generic individual-difference measure of "adaptiveness" for this population. The point of course is not that the participants are "right" and the generic top-down scale "wrong" in their definition of the trait. Our point is that a generic scale would not adequately capture the unique set of personal and situational beliefs that characterize individuals and that serve as underlying determinants of their behavior when facing the tasks of adapting to the new environment.

The strengths of this research procedure are well revealed by comparing idiographic and nomothetic results, that is, by comparing the self-efficacy results obtained by analyzing participants' self-identified attributes versus the generic positive and negative attributes. Figure 2 displays perceived self-efficacy levels in those clusters of situations in which each given attribute was judged to help or hinder performance of the behavior. As is apparent, significant variations in perceived self-efficacy are found with respect to the idiographically identified characteristics, whereas little variation is found when the generic attributes are considered.

An important implication of these results (Jencius, 1999) is that they highlight a limitation of the traditional nomothetic technique of assessing all individuals via a universal template of test items. Even when one has developed psychometrically-sound individual-difference measures of a given construct, the measure may be insufficient to capture idiosyncrasy of the individual case. For many individuals, their beliefs about their personal attributes and the situations to which those attributes apply are greatly at variance with the population prototype captured by nomothetic instruments.

In a third line of research, work by Shadel and colleagues advances a social-cognitive theory of smoking and cessation (Shadel et al., 2000; also see Shadel & Mermelstein, 1996). They posit that three aspects of personal knowledge contribute to smoking outcome: (a) a smoker self-schema, that is, a smokers' knowledge of psychological characteristics that uniquely describe them as smokers and differentiate them from nonsmokers; (b) an abstainer ideal-possible self (cf. Higgins, 1987), which represents knowledge of the nonsmoking person that the smoker strives to become, and (c) an abstainer ought-possible self, which consists of smokers' beliefs about the kind of person they should or ought to become, including recognition of social and interpersonal obligations associated with smoking and quitting smoking. It is presumed that all individuals have some knowledge in all three domains. However, the content of that knowledge, the degree of its elaboration, its organizational structure, and the life circumstances in which it becomes activated may vary idiosyncratically.

This theoretical framework (Shadel et al., 2000) dictates requirements for assessment. One must, firstly, tap each of three domains of knowledge in ways that are sensitive to unique cognitive content and organizational structure, and secondly, determine the situations that activate these cognitive domains. To accomplish this, Shadel et al. (2000) employ idiographic assessments. Participants describe each aspect of self-concept in free-response written descriptions, and subsequently judge whether each of a series of potential smoking-related circumstances is relevant to each of the three aspects of self.

Findings reveal that, to understand the personality structure of the individual smoker, it is necessary to assess a system of interacting self-referent and situational beliefs. Different individuals who possess similar views of self are found to differ substantially in how they link these beliefs to social settings (Figure 3). An assessment of decontextualized personal attributes, then, would not enable one accurately to predict smoking be-

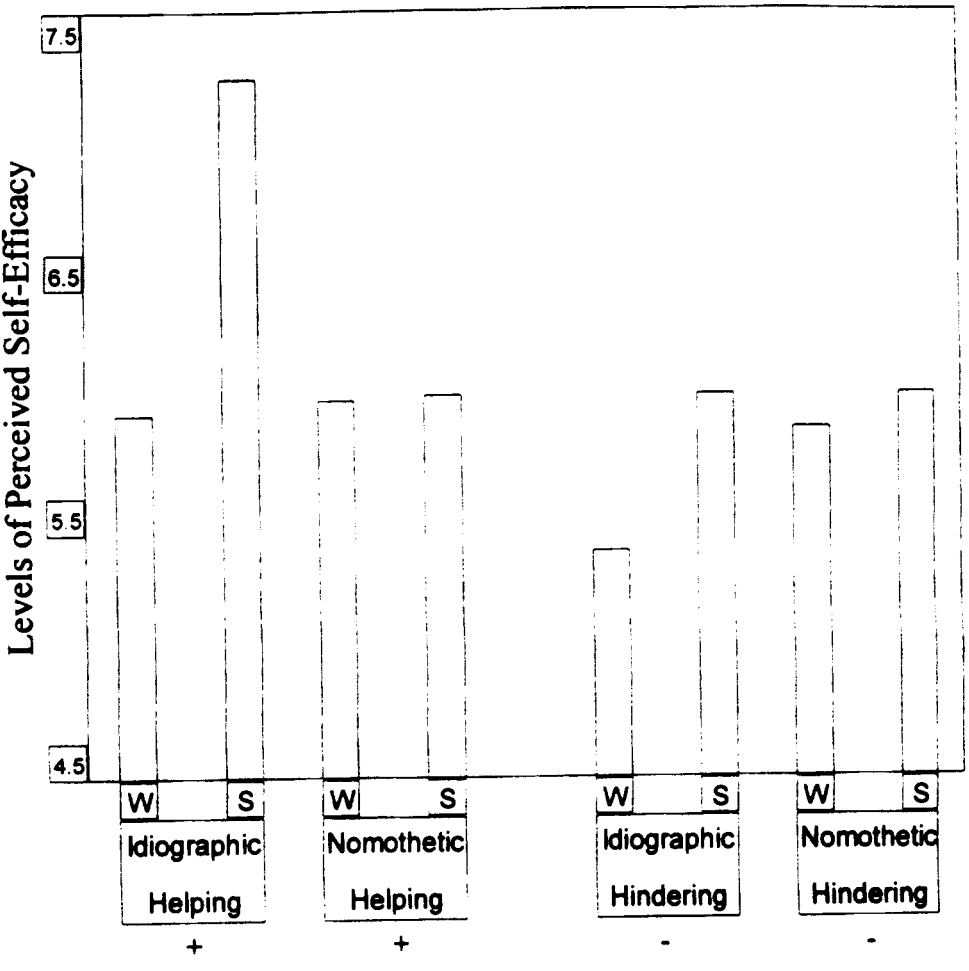

Figure 2

Self-efficacy results obtained by analyzing participants' self-identified attributes versus the generic positive and negative attributes (Jencius, 1999).

Note: Levels of perceived self-efficacy varied in clusters of situations in which each given attribute was judged to help or hinder performance of the behavior. Significant variations in perceived self-efficacy are found with respect to the idiographically identified characteristics, whereas little variation is found when the generic characteristics are considered. W is personal weaknesses; S is personal strengths.

havior (see Gilbert, 1995). Shadel et al. (2000) find that the situation-to-situation variability in the degree to which a schema is activated is a stable indicator of personality (cf. Mischel & Shoda, 1995). By assessing a system of potentially idiosyncratic personal and situational beliefs, then, one uncovers individual differences that would have been missed in a traditional assessment approach.

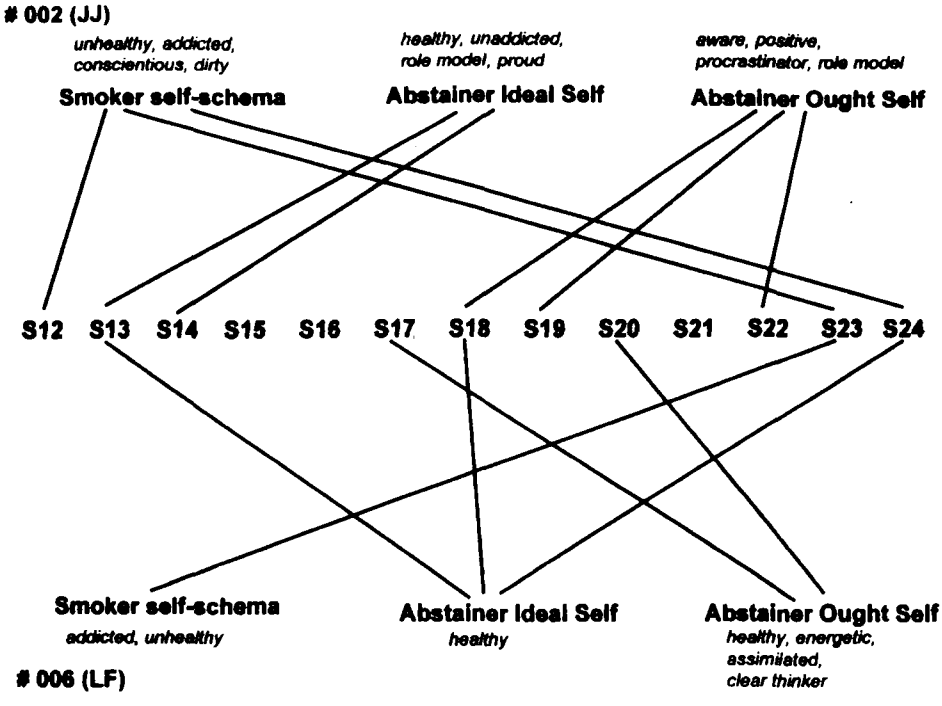

Figure 3
Schematic representation of personal and situational beliefs of two participants (#'s 002 and 006) in a smoking cessation program (Shadel et al., 2000).

Note: The top and bottom rows display the content of each of three aspects of self-concept. The middle row lists a set of social settings that one might subjectively link to each self-aspect. Lines depict the links in the beliefs systems of the two individuals.

Conclusions

Our three research programs reviewed here embody the social-cognitive principles of personality theory and assessment that we outlined earlier. We assess, firstly, underlying processes rather than merely surface-level individual differences; secondly, psychological mechanisms that causally contribute to personality functioning and development; thirdly, the unique configurations of social-cognitive processes that characterize the individual; fourthly, the contexts in which these processes come into play; and fifthly, we do so within an overall theoretical framework that addresses the functional relations among cognitive, behavioral, and affective systems, rather than treating these alternative responses systems more as alternative indicators of a global construct (Bandura, 1986; Caprara & Cervone, 2000; Cervone & Williams, 1992).

Whatever one judges their strengths and merits to be, the research programs described here unquestionably yield two advantages that generally do not accrue from traditional assessment strategies, that is, assessment strategies that aim to locate an individual's dispositional tendencies

within a fixed system of individual-difference dimensions. The first is that one learns about idiosyncratic tendencies of the individual. Our results, and many others, suggest that individual persons may exhibit psychological tendencies that, at best, are poorly captured by traditional individual difference systems. To capture the individual, one needs to go beyond the generic portraits provided by nomothetic dispositional approaches (Cervone & Shoda, 1999b).

The second advantage involves the question of psychological change. Personality assessment can and should contribute to the task of fostering therapeutic psychological change. To do this, assessments should target personality structures and processes that causally contribute to psychological distress. These personality variables then can become targets of therapeutic efforts. The implication is that the most useful personality assesments would not merely describe individuals' dispositional tendencies. They would identify personal determinants of distress versus well-being. Change can best be brought about by assessing causal determinants of experience and action; as Bacon (1967, p. 28) put it, "where the cause is not known the effect cannot be produced." The social-cognitive assessment strategy we have outlined has the advantage of directly targeting psychological mechanisms that are known to contribute to maladjustment, and that can be modified via well-developed therapeutic methods (e.g., Barlow, 1993). Assessing social-cognitive mechanisms, then, is not merely a way of classifying what individuals are like. It also is a first step in helping people develop into the persons they wish to become.

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