

CHAPTER 8

The Cognitive-Affective Processing System

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A PARADIGM SHIFT IN PERSONALITY PSYCHOLOGY: CAPS THEORY FROM 1968, 1973, 1995, TO BEYOND 162

Personality is a topic that is inherently interesting to both laypeople and behavioral scientists. Humans start making judgments about what other people are like from the first “thin slices” of information we get about them (Ambady & Rosenthal, 1993; Zebrowitz & Collins, 1997). We revise and enrich our representations of others as new information comes in, through direct behavioral observation, conversation and self-disclosure, gossip and second-hand information, etc. (Berg & Archer, 1982; Blackman & Funder, 1998; Gilovich, 1987; Kammrath, Ames, & Scholer, 2007). We take in information about personality not just through naturalistic means, but also through personality assessments conducted by experts. Companies spend lots of money hiring consultants to come in and do personality assessments of team members. Dating websites highlight their use of personality assessments as a way to lure members. Given all of the attention and resources devote to obtaining information about people’s personalities, it begs the question: What good *is* personality information for navigating our social worlds?

When discussing and evaluating the merits of different scientific theories of personality, it may be helpful to consider the purposes for which people typically use and seek personality information, and to examine the extent to which a given personality theory offers tools and constructs that advance these purposes. Of the many possibilities, we’d like to highlight three primary purposes for which people use personality information. The first is *prediction*. How is a person likely to act, especially as their behaviors might impact my own outcomes? People are interested in predicting others’ behavior at both general and specific levels. On the one hand, it is good to get

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a general sense of a person’s global behavior base rates. How frequently will interactions with a certain person be pleasant and agreeable versus unpleasant and disagreeable? What percent of tasks that the person pursues will be completed in a timely and high-quality manner? On the other hand, people frequently want to be able to make more specific predictions—if I introduce my new dating partner to my mother at Thanksgiving dinner, will she be welcoming to him? (And what about on a different day?) If I assign this faculty member to this committee, will he keep up with the committee responsibilities at the end of the semester when committee tasks are highly urgent but teaching demands are also high? Having the ability to predict another person’s behavior, both in terms of general base-rates and specific likelihoods for specific situations, is extremely useful, particularly for person selection (who to hire, who to marry) and person placement (who to assign this task, or this role).

The second useful purpose of personality information is *explanation*. We may learn that someone frequently expresses anger by shouting, or that another person consistently procrastinates starting unpleasant tasks, information which may satisfy our general goal of prediction, but we still want an answer to the question of why: What are the underlying reasons that this person does the characteristic behaviors that they do? When people behave in ways that noticeably differ from how others behave, or when they engage in characteristic actions that impact our own outcomes, we often want to go beyond mere description of those behaviors to an understanding of the causal reasons behind those behaviors (Kelley, 1967). Does the angry shouter shout because her anger is very extreme? Is it

because she expects shouting to result in getting what she wants? Is it because she doesn't think that shouting is inappropriate or hurtful? Causal explanations for characteristic behaviors can lead to enhanced predictions, and they give us a window into what life might be like for a person with a different personality than our own.

The third useful purpose of personality information, *influence*, draws on and applies the previous two purposes. Once we are in committed interdependent relationships with others, we need to coordinate our behaviors to create positive relational and instrumental outcomes. Because of the high interdependence of humans with those in their social groups, we influence other people all the time, for better or for worse, and we are frequently looking to use personality information to enhance the “for better” and minimize the “for worse.” Will a particular colleague be more likely to comply with a request framed as a threat or as an opportunity? Would it be better in a certain friendship to disclose a hard truth, or maintain a white lie? People don't just look to personality information when they are selecting persons and placing them in tasks and roles, they also hope to use this information to learn how to maximize interpersonal harmony and/or effectiveness in their committed relationships. Research on influence and persuasion offers generalized advice on the topic of how to influence others, but people often seek more specific information. If one wants to get a procrastinator to start working sooner, for example, it is not enough to know that it might be effective to increase the penalty for lateness or to increase the perceived likelihood of success, or any of a number of other cognitive-behavioral interventions. We need to know what will motivate this *particular* procrastinator. When we get to know one another's personalities well, we can customize our influence strategies to the specific person and the current situation.

A good scientific personality theory should, we believe, offer tools to advance all three of the above concerns: prediction, explanation, and influence. Mischel and Shoda's (1995, 1998, 2008) Cognitive Affective Personality System (CAPS) theory, described in this chapter, is one such theory. In the first half of the chapter, we review the development and major tenets of CAPS theory, highlighting its distinctive contribution to a scientific understanding of personality, and we describe recent research in this meta-theoretical tradition. In the second half of the chapter, we turn our attention to a new generation of theories emerging on the scene of personality research—functionalist approaches—and discuss how this new perspective can be fruitfully integrated to advance existing CAPS theoretical principles.

A PARADIGM SHIFT IN PERSONALITY PSYCHOLOGY: CAPS THEORY FROM 1968, 1973, 1995, TO BEYOND

Mischel and Shoda's work on CAPS theory (Mischel, 1968, 1973; Mischel & Shoda, 1995, 2008) introduced an important new paradigm in the field of personality psychology, which inspired a new subgroup of personality theories, known as *social-cognitive* theories. To highlight the contributions of CAPS theory, we begin by contrasting an alternative type of personality theory: dispositional essentialism.

Dispositional Essentialism

In simplest form, dispositional essentialist theories posit that individual differences in behavior result from a set of essential internal qualities that function to modulate the probability of behavior occurrence (Kagan, 2007; Shweder, 2007). Such theories take the form “this person frequently/infrequently engages in behavior X because s/he has a low/high disposition to engage in behavior X.” Dispositional essentialist theories are arguably highly circular, but likely feel familiar to most readers, as laypeople commonly use this kind of language to explain one another's behavior. When a manager asks why an employee is not working hard at assigned tasks, a fellow employee might answer, “It's because he is lazy,” which in effect simply says, “it's because he has a fixed internal essence that gives him a tendency to not work hard.” As another example, one might similarly say that people who frequently perform friendly behaviors are high in dispositional friendliness, whereas people who rarely perform friendly behaviors are low in dispositional friendliness.

It is important to point out that we all are likely to be dispositional essentialists, at least some of the time, in our lay explanations of individual differences. Although people will sometimes engage in much richer personality explanations than the examples above (Idson & Mischel, 2001; Malle & Hodges, 2005), we are often content, in everyday explanations for behavior, to locate the source of the behavior somewhere inside the person as a stable, internal force, without providing much further explanation (Jones et al., 1987; Kelley, 1967). Within the landscape of scientific theories of personality, trait theories have most frequently been described as dispositional essentialist theories (Mischel, 1968; Shweder, 2007), because the same terms—trait adjectives—are frequently used to describe a behavior and the internal dispositions believed to give rise to the behavior, such as a friendly trait causing friendly

behavior. Moreover, modern trait theories of personality rely heavily on factor analytic techniques to extract “latent traits” (John & Srivastava, 1999), which are theoretical, unobserved causal essences posited to cause behavior, but which are estimated and described primarily in terms of the indicator variables they are supposed to explain (Borsboom, Mellenbergh, & van Heerden, 2003; Wood & Hensler, 2011).¹

The first thing to note about dispositional essentialism is that it provides tools for only one of the three previously identified purposes of personality information: prediction. A description of dispositional essences allows one to make predictions about someone’s behavior frequencies, but it offers no insight about the nature of the underlying causes of these behavior tendencies and no insights as to how one might strategically interact with another person to alter their behavior and/or interpersonal outcomes. Describing a person as “lazy,” for example, does not help one learn anything about the reasons why the person fails to effortfully pursue assigned tasks or provide any insight into ways to motivate the person to work hard on particular important goals.

A further problem with dispositional essentialism came to light when a plethora of research throughout the 20th century discovered that behavior prediction on the basis of dispositional assessments—the one function this type of theory was supposed to reliably accomplish—was surprisingly elusive. A person who scored as honest, friendly, or self-disciplined on dispositional assessment might or might not display correspondent behavior in a particular occasion where such behavior was afforded by the situation and recorded by the researcher (Mischel, 1968). At first researchers concluded that the problem must be located in the unreliability of their existing personality assessment measures, but mounting evidence led several investigators in the 1960s to conclude that human behavior was simply more variable than initially expected (Mischel, 1968; Peterson, 1968; Vernon, 1964).²

In fact, Fleeson and colleagues (Fleeson, 2001, 2004; Fleeson & Leicht, 2006; Nofle & Fleeson, 2010) have

¹It should be noted, however, that there is substantial variability among trait theories in the extent to which they fit the prototype of a dispositional essentialist theory. Many modern trait theories go beyond simple dispositional essentialist principles to postulate more specific psychological processes involved in behavior production (Fleeson, in press).

²Research on social perception has since uncovered a variety of reasons that lay perceivers maintain the intuition that individuals behave more consistently than they actually do (Srull & Wyer, 1989).

persuasively shown that in daily life, nearly all individuals regularly display behaviors from both poles of any given dispositional dimension: from friendly to unfriendly, honest to dishonest, and so on. Given the tremendous flexibility and variability of human behavior, it has become clear that information about global dispositional tendencies can provide only a probabilistic prediction of behavior in any specific instance. The typical global unconditional probability of a behavior (i.e., dispositional tendency) may indeed differ from person to person, but these probabilities on the whole tend to be low rather than high, as might have originally been expected. For small probabilities, large samples of accumulated occasions are necessary for regularities in behavior to reliably manifest (Epstein, 1979).

Once this fact was recognized, trait theorists were able to reorient their search for valid personality prediction, and subsequently the hypothesis that people reliably differ in their behavior base-rates has been widely supported. Thus, when dispositional assessments are used to predict global behavior averages over a large enough sample of occasions (Epstein, 1979; Fleeson & Gallagher, 2009), or to predict cumulative outcomes, such as the judgments of close others (Funder, 1995), the quality of relationships (Ozer & Benet-Martinez, 2006), overall job satisfaction and motivation (Judge, Heller, & Mount, 2002; Judge & Ilies, 2002), long-term health or well-being (T. W. Smith & MacKenzie, 2006; Steel, Schmidt, & Shultz, 2008), then substantial predictive validity is achieved. Nevertheless, the goal of situation-specific prediction from dispositional assessments has continued to prove challenging (Mischel & Shoda, 2008).

The Cognitive-Affective Personality System (CAPS) Theory

When Walter Mischel undertook a systematic review of the field of personality in 1968, he uncovered a great deal of evidence that people display much higher variability in behavior from situation to situation than previously assumed. In his own work, for example, he demonstrated that a child who was capable of a high degree of self-discipline in one lab situation where she or he was required to delay gratification might be utterly unable to display similar self-discipline in a slightly modified lab situation, and vice versa (Mischel, 1974). In his 1968 book, *Personality and Assessment*, Mischel made the case that individuals frequently display behaviors that deviate from their “dispositional tendency,” and that indeed, strong evidence for the existence of global behavior tendencies was currently lacking in the empirical literature.

Many personality theorists perceived this argument as one that undermined the very foundations of a scientific study of personality. If a person's behavior was highly dependent on the specific situation in which she or he found him- or herself, perhaps personality consistency and dispositional person factors were a myth. Thus, the "person-situation debate" was born. Although Mischel's 1968 critique sparked this debate, Mischel was not an active participant in it; in fact, in 1973 he actively tried to end the debate by changing the terms of the discussion (Mischel, 1973). Rather than perceiving the evidence of behavioral variability as a paradigm crisis, Mischel used it as an opportunity for a paradigm shift.

It is now recognized that people's behavior is best described by a distribution of variable actions with a particular central tendency (Fleeson, 2001; Fleeson & Nofhle, 2009). From the perspective of dispositional essentialism, the central tendency is what reveals personality, and any deviations from that central tendency might be attributed to situations or to randomness, but do not reflect the person. Thus, if person is typically not hardworking, but does occasionally perform bursts of high-intensity effort, a dispositional essentialist would focus on the average behavior frequency and characterize the person as lazy (or low in conscientiousness). A dispositional essentialist would deal with the inconsistent behaviors by simply averaging them in with the rest. Thus, nothing special would be done with the information that this person is sometimes capable of showing high effort.

In contrast to this averaging approach, in Mischel's 1973 "Towards a Cognitive Social Learning Reconceptualization of Personality" article, he turned the "problem" of behavior variability on its head, by suggesting that the very fact that people are capable of such flexibility in behavior suggests that we need a new theory of behavior generation, one that can simultaneously encompass the central tendency (Why is this person non-hardworking so much of the time?) and the deviations from this tendency (Why does this person exert high effort on those occasions that she or he does?). Mischel argued that personality is revealed both in those situations where the average tendency is manifested and in those situations where behavior deviates, and that by examining the conditions that elicit one behavior versus another, personality psychologists could gain a deeper understanding of the psychological processes underlying the person's characteristic behavior patterns (for a similar argument, see Fleeson, in press).

Imagine two glasses, each filled with a clear liquid. Both are translucent. Both are wet. Both are frequently consumed at bars and restaurants. One, however, is

flammable whereas the other is used to put out fires. Vodka and water look similar most of the time, but their different response to flame is one way to determine that they are fundamentally different compounds. Mischel (1973) proposed that like chemical compounds, human beings reveal the basic units of their personalities in the flexible ways they respond to their situations and environments. To fully understand a person, it is not enough to observe his or her current steady state, or to extract a decontextualized behavior base-rate from multiple observations—one must come to know the specific situations in which the person characteristically dials his or her behavior up or down, left or right (e.g., what does and does not provoke aggression, what leads to persistence versus withdrawal).

Mischel (1973) specifically proposed that the fundamental explanatory variables for personality should not be "dispositional tendencies" to engage in particular behaviors, but rather, psychological process variables that explain how people give meaning to situations and actively pursue their goals within them. Individuals are not seen as passive emitters of behavior, but rather as active agents that flexibly respond to perceived situational contingencies. Thus, the basic units of personality should be those that explain how people interpret, experience, and respond to situations. Mischel highlighted five types of psychological process variables—called *cognitive-affective units* or CAUs—that causally explain a person's characteristic responses to situations: (1) encodings, (2) expectancies and beliefs, (3) affects, (4) goals and values, and (5) competencies and self-regulatory plans (Mischel, 1973; Mischel & Shoda, 2008). These five variables are summarized in Table 8.1.

In their 1995 articulation of CAPS theory, Mischel and Shoda proposed that a person's personality is actually a "system" or network of CAUs, characterized by the

TABLE 8.1 Types of Cognitive-Affective Units in the Personality Mediating System

Encodings: Categories (constructs) for the self, people, events, and situations (external and internal).

Expectancies and Beliefs: About the social world, about outcomes for behavior in particular situations, about self-efficacy.

Affects: Feelings, emotions, and affective responses (including physiological reactions).

Goals and Values: Desirable outcomes and affective states, aversive outcomes and affective states, goals, values, and life projects.

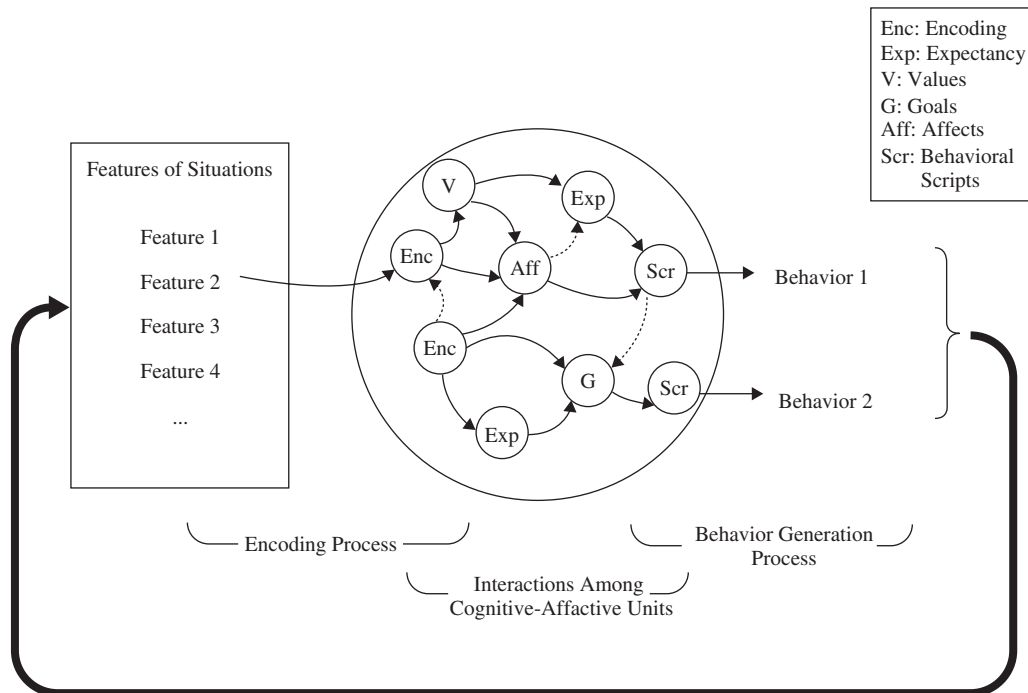
Competencies and Self-Regulatory Plans: Potential behaviors and scripts, and plans and strategies for organizing action and for affecting outcomes and one's own behavior and internal states.

Note. From Mischel and Shoda (2008, p. 211). Copyright 2008 by Guilford Press. Adapted by permission.

chronic accessibilities of the CAUs, the interconnections among the CAUs, and links between CAUs and features of psychological situations (Mischel & Shoda, 1995). When a person enters a situation, key psychological features of the situation are encoded and interpreted by the person, in light of his or her active goals, affects, expectancies, and so on. Activation spreads among linked CAUs as through an associationist network (see Figure 8.1). For example, a person might hear his romantic partner say, “Why didn’t you go to the grocery store on the way home from work?” and encode this as a criticism and a rejection, and might subsequently feel heightened anxiety and a goal to defend the self, leading to the activation of argument scripts. Another person might hear the same statement from a romantic partner and might encode it as a friendly reminder, and might subsequently feel heightened guilt and a goal to meet the other person’s needs, leading to the activation of a grocery shopping script. Importantly, the same person might experience either pattern depending on the state of the CAU network at the time the situation was encountered—if thoughts of rejection were accessible at the time of encoding, one response might be provoked,

but if thoughts of security and affiliation were accessible at the time of encoding, another might emerge.

People differ, according to CAPS theory, in (a) the *accessibility* of particular CAUs (e.g., encoding rejection, feeling anger, experiencing a goal to protect the self), (b) in the psychologically *active ingredients of situations* that activate the CAUs, and (c) in the *patterns of connection* among CAUs (Mischel & Shoda, 2008). One person, for example, might be chronically vigilant for rejection cues, and as a result, might encode a wide variety of ambiguous interpersonal situations as rejecting, and subsequently experience strong arousal of fear and anger emotions in those situations, emotions that quickly activate aggression scripts (e.g., a high rejection sensitive person; Pietrzak, Downey, & Ayduk, 2005). Another person, on the other hand, might be less on-guard for rejections from others, and thus encode rejection less frequently. Moreover, this other person might also have a weaker connection between feelings of anger and activation of hostile behavior scripts, because of strong self-regulatory plans that become active when anger is aroused (e.g., a highly agreeable person; Graziano & Tobin, 2009).



Situational features activate a given mediating unit, which activates specific subsets of other mediating units through a stable network of relations that characterizes an individual, generating a characteristic pattern of behavior in response to different situations. The relation may be positive (solid line), which increases the activation, or negative (dashed line), which decreases the activation.

Figure 8.1 The cognitive-affective processing system (CAPS)

From Mischel and Shoda (1995, p 254). Copyright 1995 by the American Psychological Association. Adapted by permission.

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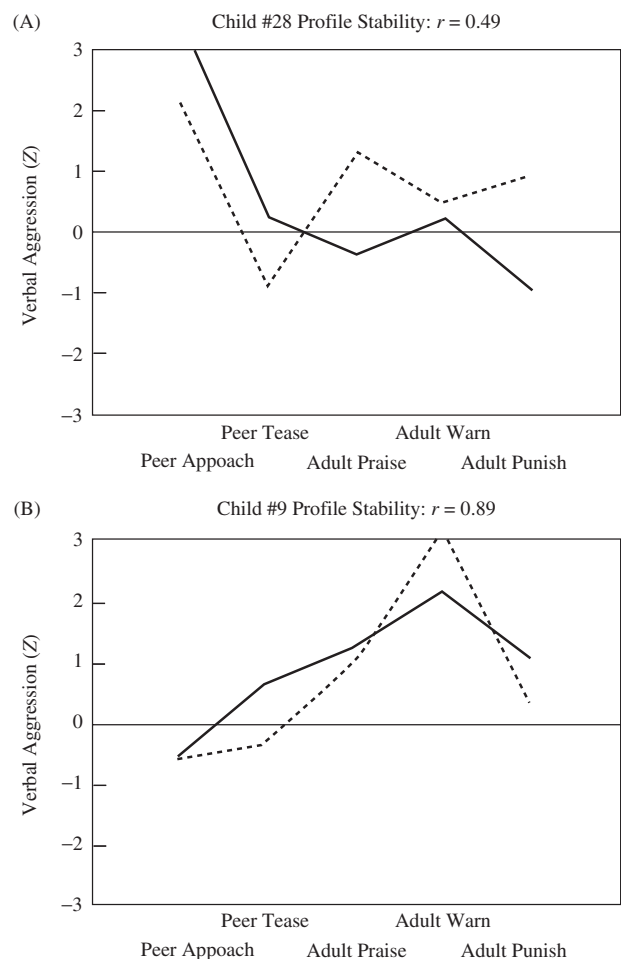
This type of personality system is able to generate many different types of behavior patterns (Bolger & Romero-Canyas, 2007; Mischel & Shoda, 1998). To the extent that a person encounters many situations that he encodes in similar psychological units, the person will manifest a higher global act-frequency of the behavior linked to those encodings. For example, a person who sees provocation in many interpersonal interactions is likely to display higher global act-frequencies of aggressive behavior. On the occasions that the person encounters situations that he encodes in different psychological units, however, the person will manifest behaviors that vary from this global act frequency, revealing a predictable *if... then...* profile, for example, “if provoked, then aggressive; if praised, then benevolent.”

In CAPS theory, these *if... then...* situation-behavior signatures (*if* situation A...*then* behavior X; *if* situation B...*then* behavior Y) provide the clearest view of the perceptions, goals, and feelings that drive the person’s characteristic behaviors (Mischel & Shoda, 1995, 1998, 2008). Two people might avoid hard work with equal frequency, but they might be doing so for different reasons. Person A, for example, might be regulating a frequent fear of failure, whereas Person B may simply rarely see compelling rewards to motivate goal pursuit. In this perspective, the behavior variation, rather than the central tendency, provides the insight into the underlying process variables. Person A is likely to occasionally deviate from her global trend and engage in high effort specifically in those situations where expectations of success are especially high, whereas Person B is likely to occasionally deviate and engage in high effort specifically in those situations where the expected rewards are highly valued. As this example illustrates, a person’s *if... then...* profile, rather than global act-frequency, provides the most information about the underlying explanatory CAUs guiding the person’s behavior.

Modeling If... Then... Profiles

One of the first challenges for CAPS theory was to demonstrate that the variation in people’s behavior across situations really does form stable *if... then...* profiles, and is not just random fluctuation. The first empirical assessment of *if... then...* profiles took place in the early 1990s at the Wediko summer camp for boys. Under the research direction of Shoda, Wright, and Mischel (1994), camp counselors used event-contingent diaries to code the interpersonal situations encountered by each camper (e.g., the camper was approached by a peer, or warned by an

adult) and the presence or absence of aggressive response by the child. This yielded a rich dataset full of repeated situation-behavior observations for each child. From the data, Shoda and colleagues were able to construct for each child an *if... then...* profile of aggressive behavior across the interpersonal situations (see Figure 8.2). Some children were most aggressive when teased by a peer; other children were most aggressive when warned by an adult, or when approached by a peer to play. These *if... then...* aggression profiles were highly stable and reliable (Shoda et al., 1994), and showed systematic links to the personality inferences of the camp counselors (Shoda, Mischel, & Wright, 1993).



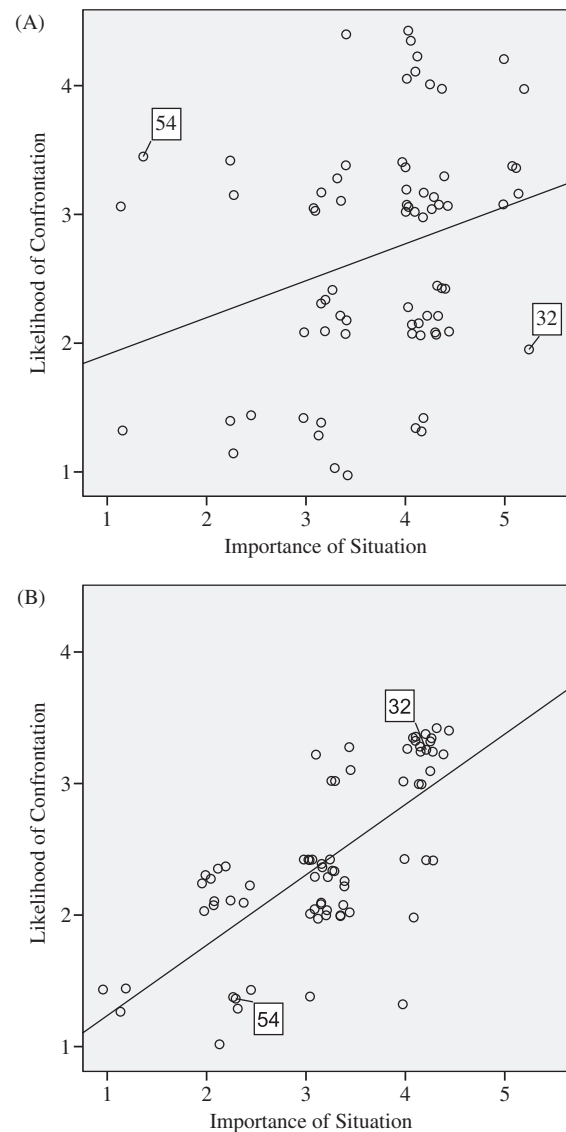
Illustrative intra-individual, situation-behavior profiles for verbal aggression in relation to five situations in two time samples (solid and dotted lines). Data are shown in standardized scores (z) relative to the normative levels of verbal aggression in each situation.

Figure 8.2 Examples of situation-behavior profiles for verbal aggression

From Shoda, Mischel, and Wright (1994, p. 678). Copyright 1994 by the American Psychological Association. Reprinted by permission.

This method of collecting *if...then...* profile data was highly laborious, both from a data collection and a data analysis perspective, and in the next several years, little research followed in the footsteps of Wediko to document and investigate *if...then...* profiles. Subsequently, however, a statistical approach to handling repeated measures data—multilevel modeling—gained popularity in psychological research (Bickel, 2007; Bryk & Raudenbush, 2002; Hox, 2002, 2010), making it more feasible to model and study *if...then...* profiles. The Wediko approach relied on the researcher's categorical identification of important classes of situations. A multilevel modeling approach allows researchers to use either categorical or continuous assessments of situations. Participants can be asked to rate their psychological situation on key dimensions themselves, or the researcher can generate situational ratings from qualitative information, such as written reports or video recordings. For example, in a recent study, Kammrath and colleagues (Kammrath, McCarthy, Friesen, & Cortes, 2011) asked participants to read 72 potentially aversive interpersonal behaviors and to indicate how important they perceived it to be to confront someone about each kind of behavior (situation rating), and the likelihood that they would actually confront a person about the behavior (response rating). Scatterplots from two participants in this study are shown in Figure 8.3. The figure shows that both participants indicated they would be more likely to assert themselves when the issue was more important; nevertheless, the slope between perceived importance and behavior assertiveness was steeper for Participant B than for Participant A, indicating that perceived importance is a stronger active psychological ingredient for assertive behavior for the former participant.

In multilevel modeling, situation variables can be used to predict the outcome variable of interest: expectancies, feelings, behaviors, and so on. The multilevel model fits a fixed slope for the situational predictor for the whole sample, but then additionally fits a deviation from this fixed slope (a random slope) for each person in the dataset. The model thus describes the normative effect of the situation (the fixed slope) as well as individual differences in responses to the situation (the random slope). For example, in the assertiveness study described above, perceived importance was a significant predictor of assertive behavior across the entire sample. Nevertheless, participants significantly differed in their random slopes—some participants showed slopes just barely above zero, whereas other participants showed slopes close to 1. Such multilevel models are easy to run in commonly available



If . . . then . . . situation-behavior profiles for two participants (Kammrath et al., 2011), plotting each person's likelihood of confrontation as a function of perceived situational importance. Participant A demonstrates a weak slope of the situational predictor: she is less confrontational in Situation 32 than in Situation 54, even though she perceives Situation 32 as much more important than Situation 34. Participant B shows a strong slope of the situational predictor, and is typically more confrontational as the situation has greater perceived importance. Thus, situational importance is a stronger "active ingredient of situations" for Participant B than for Participant A.

Figure 8.3 The role of situational importance in situation-behavior profiles for confrontation

statistical packages, such as SPSS and SAS, and they allow researchers to model multiple situational predictors simultaneously, uncovering the different active ingredients of situations important for different individuals (Fleeson, 2007; Shoda & LeeTiernan, 2002; Zayas & Shoda, 2009).

Researchers have used multilevel modeling to explore many aspects of participants' CAPS dynamics. Multilevel analyses have demonstrated reliable differences in how people weight various aspects of persons and behaviors (e.g., attractiveness, degree of prosociality) in their evaluative judgments (Kammrath & Scholer, 2011; Wood & Brumbaugh, 2009), how people form expectancies for interpersonal behaviors (Kammrath, 2011), people's emotional reactivity to event appraisals (Bolger & Zuckerman, 1995; Cote & Moskowitz, 1998; Rhodewalt & Morf, 1998; Suls & Martin, 2005; Zautra, Affleck, Tennen, Reich, & Davis, 2005), and their behavioral responses to the actions of others (Fleeson, 2007; Fournier, Moskowitz, & Zuroff, 2008; R. E. Smith, Shoda, Cumming, & Smoll, 2009). Several researchers have recently called for greater use of multilevel modeling to explore individual differences in response to situations (Bolger & Romero-Canyas, 2007; Fleeson, 2007; Shoda & LeeTiernan, 2002; Zayas & Shoda, 2009).

CAPS as a Meta-Theoretical Perspective

CAPS, like dispositional essentialism, is a meta-theory of personality, rather than a specific theory of a particular set of personality processes. Numerous theories of more specific personality patterns fall nicely within the CAPS meta-theoretical perspective; most of these are from a tradition known as *social-cognitive* theories of personality. Two such theories are frequently cited as prototypes of the CAPS meta-theoretical perspective: the hot-cool theory of self-regulation (Metcalfe & Mischel, 1999) and the rejection-sensitivity model (Romero-Canyas, Anderson, Reddy, & Downey, 2009). These theories will not be reviewed here, as they have been extensively discussed in other CAPS chapters (Mischel & Shoda, 1998, 1999, 2008), but the reader is directed to these chapters as excellent summaries.

Another prominent personality theory that sits comfortably within the CAPS meta-theoretical tradition is attachment theory (Collins, Guichard, Ford, & Feeney, 2004; Feeney, 2006; Mikulincer, Shaver, Cassidy, & Berant, 2009; Shaver & Mikulincer, 2009). Rather than viewing attachment styles as essential dispositions (e.g., for interpersonal anxiety or avoidance), anxious and avoidant attachment styles are understood at the level of CAUs: They are believed to arise from different mental models of the interpersonal world. People with high attachment anxiety expect caregiving to be inconsistent and unreliable, leading them to vigilantly watch for signs of rejection and neglect, to experience anxiety when such signs are

detected, and to cope using a variety of tactics, including ingratiation and pre-emptive hostility (Shaver & Mikulincer, 2007). People with high attachment avoidance expect caregiving to be simply unavailable, leading them to vigilantly watch for signs of interdependence and attachment to others, and to experience threat when such signs are detected, and to cope using a variety of tactics, including hyper-independence and suppression of the attachment system (Edelstein & Shaver, 2004). Thus, attachment anxiety and attachment avoidance are associated with monitoring systems that are tuned to different situational "threats": rejection versus interdependence, respectively. When key activating situations are encountered, these two personality styles are linked to different expectancies, goals, affects, and they manifest in different patterns of self-regulation and goal pursuit.

Dweck's mind-set theory (Dweck, 2006, 2008; Dweck & Grant, 2008; Dweck & Leggett, 1988), a social cognitive personality theory from the achievement literature, provides another excellent example of a theory within the CAPS meta-theoretical tradition. According to this theory, variation in effort and persistence on achievement tasks is often best explained not by dispositional essences (e.g., an internal tendency to be lazy or to be conscientious), but rather by the goals and beliefs a person brings to a particular achievement situation. Two personality styles, arising from two "mind-sets," are described in this theory. People who have "fixed" mind-sets believe that intelligence is an immutable internal quality that manifests in the world with high performances on achievement tasks. When people with fixed mind-sets encounter an achievement task that is within their current skill level, they adopt a goal to perform with distinction and they put in effort to achieve this goal. If, however, they encounter an achievement task that is a stretch for their current skill level, or if they have recently experienced failure, they adopt a goal to avoid future failed efforts, and they self-handicap and disengage from the task. Thus, a person with a fixed mind-set may appear highly conscientious in one setting but low in conscientiousness in another, depending on the perceived risk of failure. Individuals who have "growth" mind-sets, on the other hand, believe that intelligence is an internal quality that can grow in capacity with challenge and practice. If these people encounter an achievement task that is a stretch for their current skill level and where there is a risk of failure, they adopt a goal to learn from the experience and to grow their skill level through trial and error, and they work effortfully toward that end. Thus, people with growth mind-sets appear most conscientious when they are the most, rather than the least, challenged.

A final theory consistent with the CAPS approach that we will mention here is Higgins's regulatory focus theory (Higgins, 1997, 2001; Molden, Lee, & Higgins, 2008; Scholer & Higgins, 2010). According to this theory, there are two independent motivational systems: the promotion system is concerned with advancement, whereas the prevention system is concerned with safety. When people's promotion systems have been activated, their attention is drawn toward opportunities, and they approach gains and avoid nongains with an eagerness self-regulatory strategy. If they achieve their desired gains, they experience emotions of elation, but if they fail to achieve these ends, they experience emotions of dejection. When people's prevention systems have been activated, on the other hand, their attention is drawn toward dangers, and they avoid losses and approach nonlosses with a vigilance self-regulatory strategy. If they successfully avoid a loss, they experience emotions of relief, but if they fail to avoid the loss, they experience emotions of anxiety. This theory highlights that although the features of the external situation influence a person's CAU activation in that situation, the current state of the system itself when the situation is encountered (e.g., whether the person's promotion or prevention system is more strongly activated) is also highly important in determining the encodings, meanings, and responses that the person will pursue in the situation.

The three social cognitive theories summarized above, attachment theory (Shaver & Mikulincer, 2009), mind-set theory (Dweck, 2008), and regulatory focus theory (Higgins, 1997), all focus on CAUs as the core explanatory variables for their specific personality processes. The three theories also heavily emphasize the situational contexts that activate characteristic personality dynamics, and they emphasize how a person's behavior is likely to vary in predictable, meaningful ways depending on the situation. It is these features that situate the theories in the CAPS meta-theoretical tradition. We will return to these theories in the second half of the chapter, when we discuss functional approaches to personality and behavior variation.

Building Bridges Between CAPS and Trait Theories of Personality

For many years, research in the CAPS tradition and trait tradition continued on independent tracks. Trait researchers were focused on the challenge of identifying the best number of latent trait factors to capture the co-variation of natural language trait adjectives (John & Srivastava, 1999), and on finding rigorous evidence that individual differences in global act frequencies do indeed

exist (Fleeson & Gallagher, 2009). Once these questions were satisfactorily answered, however, many trait researchers turned their attention to questions of psychological processes and mechanisms. Research has uncovered, for example, that extraversion is associated with enjoyment of risk, high positive emotionality, positive perceptions of others, and a number of other process variables (Fleeson, in press; Matthews, 2008; Wood & Hensler, 2011).³ Further bridging the gap between trait and CAPS personality approaches, research has linked each of the Big Five trait constructs to *if...then...* behavior profiles (Bolger & Zuckerman, 1995; Cote & Moskowitz, 1998; Fleeson, 2007; Kammrath, 2011; Kammrath et al., 2011; Kammrath, Mendoza-Denton, & Mischel, 2005; Kammrath & Peetz, 2011; Kammrath & Scholer, 2011). This research suggests that the kinds of traits studied in the trait tradition may manifest in highly contextualized ways.

Thus, it now appears that at the level of psychological process variables and contextualized behavioral manifestations, there are many similarities between trait personality constructs and CAPS personality constructs. A likely reason for these similarities sits in the head of the lay perceiver (Kammrath et al., 2005). It is true that perceivers identify behaviors in trait terms very quickly (Winter & Uleman, 1984). Nevertheless, perceivers use all kinds of information about the situation and the person to disambiguate the "meaning" of the behavior before they identify the correct trait designation (Reeder, Vonk, Ronk, Ham, & Lawrence, 2004; Trope, 1986). Trait adjectives often connote not only a behavior tendency, but also a set of CAUs that give rise to the behavior (e.g., friendly behavior isn't friendly if it is done for selfish reasons), and a set of characteristic situations in which the behavior should be more or less likely to occur (e.g., friendly people should be more outgoing with peers than with high-status others; unfriendly people should be more outgoing with high-status others than with peers). Thus, when a layperson explains a friendly behavior by saying "she's a friendly person," this explanation may not be as close to dispositional essentialism as it first appears (Kammrath et al., 2005).

³Most trait theorists would agree with Mischel and Shoda that cognitive-affective process variables are theoretically important personality constructs, although there is disagreement among trait researchers as to whether these process variables are simply mediators of the more causally central latent traits, or whether, as Mischel and Shoda argue, the process variables are indeed the core of personality (Fleeson, in press; Lucas & Donnellan, 2009; Wood & Hensler, 2011).

The Functional Utility of a CAPS Perspective

To examine the functional utility of CAPS as a personality theory, we will first examine the issue of *prediction*. Unlike dispositional essentialism, CAPS does not allow one to make behavior predictions in the absence of situational information. If personality is expressed in the way people interpret and respond to situations, information about the situation is crucial to making a prediction about a person's behavior. To predict the effort of a person with a fixed mind-set, for example, one must first know whether the person perceives a high or low risk of failure on the task. It is readily apparent that CAPS lends itself to situation specific predictions, but CAPS can also generate global ones. To make global behavior predictions, one must simply know something about the global distribution of situations the person regularly encounters (Bolger & Romero-Canyas, 2007). For example, is the person in an environment that rarely provides tasks that threaten failure, or is the person in an environment that regularly tests the limits of his/her current skills?

Importantly, CAPS theory cautions us from making predictions about one set of psychological situations based on observations from a meaningfully different set of psychological situations. A person who is quiet and reserved with co-workers might be able to light up a stage on performance night, or be uninhibited and emotionally expressive with a romantic partner, or fiercely aggressive in a competition. According to CAPS, behavior will generalize across situations only to the extent that situations have similar active ingredients for the individual (Mischel, 1973; Shoda & Lee-Tiernan, 2002). This perspective raises fascinating questions about situational equivalence and “diagnostic situations.” Many times when we are given the task of person selection and/or person placement (e.g., Should I have children with this person? Should I promote this person to manager?), we must try to predict their behavior in a set of situations the person has not previously encountered. CAPS theory would argue that past global base-rates will be less useful for such predictions than information about the person's characteristic behaviors in diagnostic situations—that is, situations with similar psychological ingredients to those upcoming in the new role.

To further evaluate the functional utility of CAPS theory, we will next examine the issue of *explanation*. One of the greatest strengths of CAPS is that the explanatory variables (i.e., CAUs) are different from the behaviors they are intended to explain. Rather than explaining a person's characteristic friendliness with new acquaintances using the construct “a friendly disposition,” CAPS might explain it using the person's positive perceptions of

others, goals to affiliate, feelings of enjoyment and confidence during social interactions, and so on. Rather than explaining a person's viciously harmful actions as the result of an “evil disposition,” CAPS might point to the person's poorly regulated anger reactivity, to her failure to take the other person's perspective, or to her perception that her actions served a greater good.

These explanatory variables are located at an especially meaningful level of analysis. When people explain their own behavior, they are likely to discuss their goals, feelings, and expectancies with respect to the opportunities and constraints offered by the situation (Jones & Nisbett, 1987). One could certainly build a personality theory in which the core explanatory units are neural firings or genetic codes. However, by seating the explanatory variables at the level of psychological processes, CAPS theory gives individuals tools to understand one another better through perspective-taking and mental simulation. Learning that someone has a particular variant of an allele or an abundance of a certain neurotransmitter does not help us imagine life in that person's shoes. Explaining a person's behavior in terms of his or her CAUs, however, allows individuals to access their own memories of times when they may have experienced similar thoughts, feelings, or motivations, and enables people to take more fully the perspective of others (Epley & Waytz, 2010).

CAUs are also valuable as explanatory units because they can be used to explain many different kinds of behavior consistency: between-person differences in base-rates of behavior, normative effects of situations on people's behavior, and idiographic within-person variation from situation to situation. They also work extremely well as experiential mediators of a wide variety of causal antecedents of personality, from idiographic social learning history, to cultural influences, to genetic or biological influences. If men are more aggressive, on average than women (Feingold, 1994), or if people with more reactive amygdalas are more prone to depression than people with less reactive amygdalas (Kagan, 2007), it is likely that there will always be found psychological process variables that mediate these effects (e.g., men might focus more on situational cues signaling status, or high amygdala-reactive individuals might experience more feelings of fear in response to threats). Because of the usefulness of psychological process variables for human perspective-taking, we imagine that CAUs will always have their place in theories of personality, even if a fuller mapping of distal causes comes about.

A final utility of the CAPS model is that it provides a clear map for *influence and change*. In fact, CAPS suggests several routes by which people can influence

their own behavior and the behavior of others. One route is through situation selection/avoidance. By approaching some situations and avoiding others, one can influence the frequency that particular processing dynamics get activated. A recent study found, for example, that close friends who had an accurate understanding of one another's *if...then...* trigger profiles (i.e., how negatively each person typically feels about each of 72 potentially aversive interpersonal behaviors) also reported less conflict in the relationship, presumably because they were able to avoid, to some extent, engaging in one another's strong triggers (Friesen & Kammrath, 2011). Many popular parenting and business management books encourage people to think about the situations their own behavior creates for those around them, and to recognize how one can alter a child's or employee's psychological situation by changing the approach one takes toward them (from threatening to autonomy-supportive, from permissive to authoritative, etc.). Thus, influencing the situation is one of the most powerful ways to influence behavior, changing the perceptions, goals, and feelings that the person is likely to experience.

Another route to interpersonal influence and behavior change is through CAU intervention. Such interventions are a key part of cognitive-behavior therapy, in which maladaptive cognitions are identified and modified. Social cognitive personality researchers frequently attempt to directly manipulate the encodings, beliefs, expectancies, goals, feelings, and so on, of participants, in order to demonstrate the causal centrality of these psychological variables to the personality behaviors of interest (Bartz & Lydon, 2008; Cassidy, Shaver, Mikulincer, & Lavy, 2009; Higgins, 1999a). Their success in doing so suggests that indeed, a person with a fixed mind-set about intelligence can be led to use a growth mind-set instead (Blackwell, Trzesniewski, & Dweck, 2007), or that a person with a promotion goal of advancement can be led to adopt a prevention goal of security (Liberman, Molden, Idson, & Higgins, 2001), or that a person who vigilantly guards against rejection can be trained to attend to acceptance cues (Dandeneau, Baldwin, Baccus, Sakellaropoulo, & Pruessner, 2007). Thus, by changing the accessibility of key CAUs involved in maintaining a personality pattern, the pattern itself may transform into something new.

A FUNCTIONALIST APPROACH TO CAPS THEORY

CAPS theory was developed just as the cognitive revolution was sweeping the field of psychology, and its

emphasis on associationist principles (i.e., spreading activation from situations to encodings to mental and behavioral responses) reflects that tradition. On the rise, however, is a new school in psychology, the “functionalist” approach (Buss, 2009a; Schaller & Murray, 2008; Wood & Hensler, 2011). Researchers with a functionalist approach to personality highlight not only the content of mental and behavioral associations activated by situations, but also the *functions* served by any particular set of associations (Kenrick, Neuberg, Griskevicius, Becker, & Schaller, 2010; Simpson, Beckes, & Weisberg, 2008; Tamir, 2009). That is, a functionalist approach examines the response output of the associationist system with an eye to understanding the instrumentality of the response for the active goals of the person. Thus, when a person is assessed as characteristically anxious, a functionalist asks: What functions does anxiety serve for this individual (Norem, 2008; Tamir & Ford, 2009)? If a person is frequently aggressive, a functionalist would focus on how aggressive behavior functions to help the person meet key goals (McMurrin, Jinks, Howells, & Howard, 2010).

In a functionalist approach, people's traits and behaviors are seen as imperfect-yet-functional solutions to the challenges of pursuing goals in imperfect environments (Buss, 2009b). The word “functional” does not, in this context, imply that all characteristic behavior is adaptive or healthy, but simply that the behavior serves a strategic function in the person's motivational system. Functional personality researchers come from a variety of perspectives, including evolutionary, social-cognitive, and trait psychology. They point to research highlighting the central role of motivation in organizing thought, feelings, and behavior (Bargh, Gollwitzer, & Oettingen, 2010; Gross, 2008; Kenrick, et al., 2010). Fiske famously said, “thinking is for doing” (Fiske, 1992), a sentiment since echoed by many others (e.g., “liking is for doing,” Ferguson & Bargh, 2004; “feeling is for doing,” Neuberg, Kenrick, & Schaller, 2010). Bargh has provided decades of evidence for the “remarkable transformational power of currently active goals over the rest of the cognitive and affective machinery of the mind” (Bargh et al., 2010, p. 289).

To a functionalist, “behavior can be understood only by identifying the goals to which it is addressed” (Carver, Scheier, & Fulford, 2008, p. 727). Specifically, to understand the function behind a person's characteristic behaviors, it is important to know (1) the goals, conscious or unconscious, that are active when the behavior is enacted, and (2) the perceptions, conscious or unconscious, that support the enactment of this particular behavior rather than other behaviors that could also serve one's active

goals. These correspond to the why (what are the desired ends?) and the how (what are the preferred means?) of behavior.

Many fascinating programs of research have examined specific personality processes from a functional perspective. Norem and Cantor (1986) showed, for example, that defensive pessimists actively harness feelings of anxiety to motivate themselves to work hard, and that if this anxiety-boosting strategy is disrupted, their performance is undermined. Tamir (2009) has further explored the ways in which a variety of personality traits lead individuals to harness negative emotions for their motivational properties, such as people using angry emotions to motivate assertive behavior or anxious emotions to motivate achievement striving (Tamir, 2005; Tamir, Mitchell, & Gross, 2008). In the clinical domain, researchers have shown that many negative behaviors, such as self-injurious acts and acts of aggression toward others, serve functions for the individuals who enact them, helping them to regulate emotions and pursue valued goals (McMurrin et al., 2010; Niedtfield et al., 2010). Big Five researchers with a functional perspective have begun to uncover the functions served by the behaviors on the five dimensions of extraversion, agreeableness, conscientiousness, neuroticism, and openness (Wood & Hensler, 2011). On a larger scale, evolutionary psychologists have begun to uncover how the distribution of personality traits in specific populations varies by properties of the local environment, such as openness being less common in regions of high disease prevalence (Schaller & Murray, 2008). Presumably, if traits are characteristic adaptations to goal-pursuit challenges, environmental factors that affect goal pursuit would also affect personality development (Neuberg et al., 2010).

Hierarchical Models of Motivation and *If...Then... Profiles*

Many theories of motivation point out that goals can be arranged in a hierarchy, ranging from abstract high-level goals (e.g., “be a good person”) to concrete low-level goals (e.g., “give \$5 to the child at the door asking for a donation”). Theories that focus on this hierarchical aspect of goals (Carver & Scheier, 1998, this volume; Kruglanski et al., 2002; Miller, Galanter, & Pribram, 1960; Powers, 1973; Scholer & Higgins, 2008; Vallacher & Wegner, 1987) vary in the number of levels they highlight and the terms used to describe these levels, but they agree that high-level goals capture the “why” (ends) whereas low-level goals describe the “how” (means). Lower-level goals

are systematically linked to higher-level goals, following two principles (Kruglanski et al., 2002). The *principle of multifinality* posits that the same lower-level means can be in service of different higher-level ends (e.g., hiding the truth to protect the self, hiding the truth to protect someone else). An implication of this principle is that information about outward behavior (e.g., lying) is not sufficient to know the function behind the behavior, as any given behavior might be serving a wide variety of functions. The *principle of equifinality* posits that the same higher-level end can be attained by multiple lower-level means (e.g., graduating with a high GPA can be accomplished by studying hard in registered classes, by only registering for easy classes, or by cheating on graded assessments). An implication of this principle is that a person may switch from one lower-level means to another, when perceptions of the situation change. This flexibility in strategies and tactics in response to shifting situations provides a direct link to CAPS notions of *if...then...* profiles.

In this chapter, we use Scholer and Higgins’s (Scholer & Higgins, 2008, 2010) tri-level theory of self-regulation to demonstrate the potential usefulness of an integration of functionalist and CAPS approaches to personality. Scholer and Higgins identify three levels of goals in a person’s goal hierarchy. *System level goals* are the highest level and they describe the abstract, ultimate aims the person hopes to realize (e.g., self-protection, self-advancement). *Strategic goals* are the middle level, and they describe a general means for pursuing the system level goal (e.g., eagerly approach success, vigilantly avoid failure). *Tactical goals* are the third and most concrete level, and they describe an even more specific means within the larger strategy. For example, one can try to avoid failure by working very hard or by avoiding challenging tasks, two tactics that on the surface look quite different but that serve the same higher-level strategy.

By linking Scholer and Higgins’s tri-level theory of regulation to CAPS ideas of *if...then...* profiles, we propose that situation-behavior variation can be classified into two types: tactical profiles (or tactical *shifts*) and strategic profiles (*shifts*). Tactical shifts are low-level shifts in the specific means of goal-pursuit from one class of situations to another. Tactical shifts can yield dramatic changes in observed behavior (e.g., working hard versus avoiding challenging tasks), but these shifts are organized by a higher-level strategic consistency (e.g., vigilantly avoiding failure). Strategic shifts, in comparison, are higher-level shifts in the general preferred method of pursuing the system goal (e.g., vigilantly avoiding failure versus eagerly approaching successes). Strategic shifts can activate a host

of new tactical responses to situations and can also change the links between previously associated tactics and situations (e.g., deciding to approach challenging tasks versus avoid challenging tasks). Unlike tactical shifts, strategic shifts typically reflect a profoundly different orientation of system level goals (e.g., a prevention versus a promotion system goal orientation). Thus, although tactical shifts may sometimes appear more dramatic at the behavioral level than strategic shifts, strategic shifts reflect a more profound change in the pattern of activated CAUs throughout all levels of the goal hierarchy.

To illustrate the difference between tactical shifts and strategic shifts, we will use Regulatory Focus Theory (Higgins, 1999b), applying it to the domain of financial goals (see Figure 8.4). At the system level, a person may have an abstract goal to be on strong financial footing. This system goal might be in one of two orientations: either promotion or prevention. A promotion-focused system goal is oriented toward the pursuit of advancement whereas a prevention-focused system goal is oriented toward the pursuit of security. To begin pursuing this system-level goal in the world, it needs to be translated into a general strategy for satisfying the goal. Thus, the person might adopt a “vigilance” strategy, which involves avoiding financial losses and approaching financial non-losses, or the person might adopt an “eagerness” strategy, which involves approaching financial gains and avoiding financial non-gains. These strategies, in turn, must be further specified into tactics, such as risky or conservative financial decision-making in a particular class of situations (Scholer, Zou, Fujita, Stroessner, & Higgins, 2010).

According to Scholer and Higgins (2008), the factor that is the driving force in strategy selection is *regulatory fit*, that is, how well the strategy fits with the orientation of the system goal (Higgins, 2009). If the system goal is in a promotion orientation, for example, then an eagerness strategy will be preferred. If, however, the system goal is in a prevention orientation, then a vigilance strategy will be preferred. The same system goal may be in a different orientation under different environmental contingencies

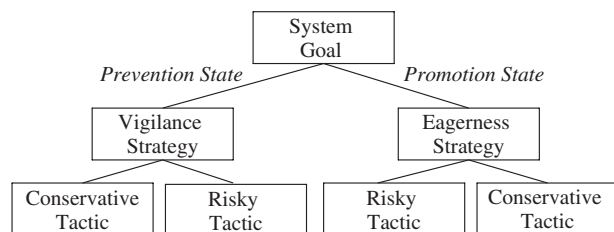


Figure 8.4 A tri-level model of sample goals, strategies, and tactics as applied to Regulatory Focus Theory

(Molden et al., 2008), and changes in goal orientation at the system level will manifest in strategic shifts. Thus, strategic shifts reveal information about the orientation of the system at the highest level. A naturalistic shift in strategy from vigilance to eagerness, for example, is a cue that the person may have shifted at the system level from a prevention to a promotion orientation.

A strategy has many different tactics linked to it. Although Scholer and Higgins (2008) have not as yet fully outlined the principles that influence tactic selection, some likely candidates are expectancies and automaticity (Bargh et al., 2010). To the extent that a tactic is under deliberate control, its selection should be influenced by perceived feasibility (i.e., “How likely is it that I can successfully execute this tactic?”) and perceived instrumentality (i.e., “What is the likelihood that the successful execution of this tactic will lead to the desired outcome?”). To the extent that the tactic is not under deliberate control, it should be influenced by the history of conditioned links between the situation, the tactic, and outcomes: Tactics that are frequently activated in the situation and followed by desired outcomes should have high accessibility for subsequent activation in similar situations (and undoubtedly, these conditioned links developed, in part, because of the feasibility and instrumentality of the tactic).

Tactical shifts will occur naturalistically in response to environmental changes that impact either the feasibility of enacting the tactic or the likelihood that the tactic will produce the desired outcomes. Research has shown, for example, that prevention-focused people pursuing a vigilance strategy will make conservative financial choices when they are financially “up” but risky financial choices when they are financially “down” (Scholer et al., 2010). When the status quo is a state of gain, a vigilance strategy requires cautious avoidance of danger, but when the status quo is a state of loss, a vigilance strategy requires approaching safety by any means necessary. The driving principle behind tactical shifts, therefore, might best be termed *strategic functionality*—people should shift tactics when the current tactic is no longer functional for meeting the active strategic goal.⁴

⁴The important dimension here is the functionality of the tactic for the active goal, not the overall functionality of the tactic for the person. Thus, one might argue that the self-injurious behavior of someone with borderline personality disorder ceases to be functional for the person overall when it puts the person’s life or health in danger, but as long as it continues to function to help the person regulate emotion in the moment, the tactic is still functional for the currently active goal (Niedtfield et al., 2010).

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CAPS theory can encompass both types of shifts, tactical and strategic, within the more general category of situation-behavior profiles. CAPS does not, however, currently highlight the distinction between these lower-level and higher-level shifts within the self-regulation hierarchy. We believe that the distinction between tactics and strategies provides a valuable addition to the CAPS approach, suggesting that not all “if...then...” shifts are functionally equivalent. Furthermore, the tri-level theory of self-regulation provides a framework to disentangle lower-level and higher-level shifts, but has not yet been widely applied as a meta-theory of personality, as has CAPS. In the sections that follow, we apply the tactical/strategic distinction to two social cognitive personality theories in the CAPS meta-theoretical tradition reviewed previously: mind-set theory (Dweck & Molden, 2008) and attachment theory (Shaver & Mikulincer, 2009).

If...Then... Profile Variation: Tactical Shifts

We define *tactical shifts* as *if...then...* profiles that result from a consistent strategy that is manifested in different tactics depending on the situation. Information about tactical shifts, we argue, is especially useful for disambiguating the strategic function of a given observed behavior. Any given behavior, such as making a risky financial decision, effortfully striving on a task, or displaying hostile rejection, can be described at the level of base-rates, but because of the principles of multifinality and equifinality, two people could exhibit the same behavior for different strategic reasons, or two people could exhibit opposite behaviors for the same strategic reason. Thus, the behavior alone cannot typically disambiguate the strategy behind the behavior (e.g., Is this person making a risky financial choice because he is eagerly approaching success or because he is vigilantly avoiding failure?). By seeing how a person switches tactics in response to different situational contingencies, however, the underlying strategy is often revealed. For example, the following pattern: “*if* situation of loss, *then* risky decision, but *if* situation of gain, *then* conservative decision” is a tactical *if...then...* profile that strongly suggests a consistent vigilance strategy.

In an achievement goal hierarchy, an observed tactic might be effortful striving (see Figure 8.5). According to Dweck (2006), a person might effortfully strive on tasks as a result of performance goal strategies or as a result of learning goal strategies. Thus, observing that a person works hard on tasks is not sufficient to identify the strategic function of hard work in the person’s goal system. To understand which strategy is driving the behavior, it

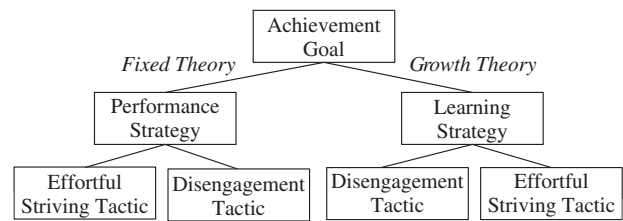


Figure 8.5 A tri-level model of sample goals, strategies, and tactics as applied to Dweck’s mind-set theory

is useful to examine the situations that produce tactical shifts. In a performance goal strategy, effortful striving is functional when such striving has a high likelihood of leading to performance success, but not when it has a high likelihood of leading to performance failure. Thus, a person pursuing a performance strategy should shift from an effortful striving tactic to a disengagement tactic as expectancies for performance outcomes change (“*if* expect success, *then* effort; *if* expect failure, *then* disengagement”). In a learning goal strategy, effortful striving is functional when such striving has a high likelihood of revealing new insights and growing one’s skills, but not when it has a low likelihood of doing so. Thus, a person pursuing a learning goal strategy should shift from an effortful striving tactic to a disengagement tactic as expectancies for learning and growth opportunities change (“*if* there is challenge or even failure, *then* effort; *if* there is no challenge or easy success, *then* disengagement”). Indeed, research suggests that performance and learning strategies are manifested in these kinds of tactical shifts (Dweck & Grant, 2008; Dweck & Leggett, 1988; Dweck & Master, 2009).

In a relatedness goal hierarchy (see Figure 8.6), observed tactics might include both friendly approach (pulling close) and hostile rejection (pushing away), as people try to keep relationships at an optimal level of closeness, responsiveness, and autonomy (Murray, Derrick, Leder, & Holmes, 2008). People who have anxious, avoidant, and secure attachment styles are likely to use both friendly and hostile tactics to meet their goals, but in different situations, according to changes in the tactics’ strategic functionality (Feeney, 2006; Mikulincer et al., 2009). People with an anxious attachment style pursue a vigilance strategy and strive to avoid painful rejection. When there is a potential threat of rejection, anxiously attached people will engage in friendly, ingratiating behaviors to ward off the rejection, but when rejection is inevitable, anxiously attached people will engage in preemptive rejection of the other person, to minimize rejection’s sting (“*if* acceptance is threatened, *then* engage in friendly repair; *if* rejection is certain,

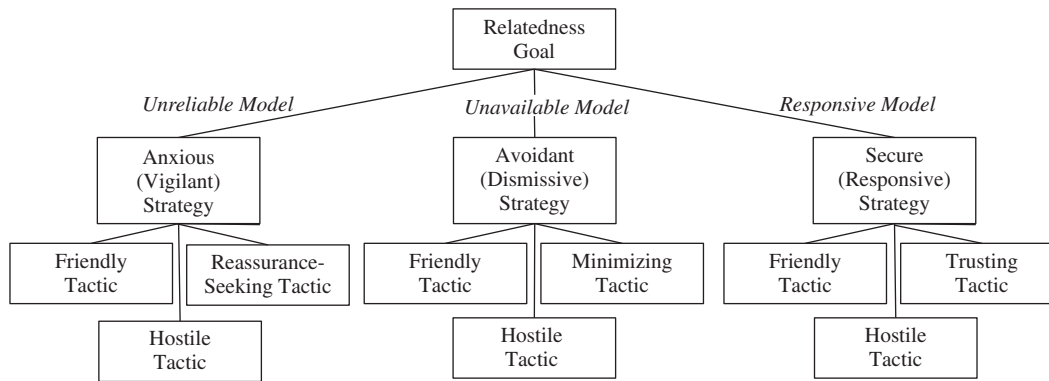


Figure 8.6 A tri-level model of sample goals, strategies, and tactics as applied to attachment theory

then engage in hostile defensiveness”). People with an avoidant attachment style pursue a dismissive strategy and strive to minimize emotional or instrumental dependence in relationships. When there is a high level of autonomy, avoidantly attached people will engage in friendly approach behavior, but when the other person shows signs of neediness, avoidantly attached people will display hostile unfriendliness (“if autonomy is secure, then engage in friendly approach; if autonomy is threatened, then engage in hostile pushing away”). Thus, both anxious and avoidant individuals are capable of friendly and hostile behavior, but they use these behaviors in different situations to advance their different strategic goals. By identifying the situational factors that catalyze the shift from friendly to unfriendly tactics (rejection versus dependence, respectively), the strategic function of the tactics is revealed.

As these examples illustrate, sometimes dramatic changes in behavior are driven by a strong consistency at the strategic level. An anxiously attached person can shift from friendly approach to hostile rejection, all in pursuit of a strategy of protecting acceptance. In this case, a friendly tactic does not necessarily imply a shift to a secure attachment strategy and a hostile tactic does not necessarily imply a change to an avoidant attachment strategy. Indeed, it is *precisely* situational shifts at the tactical level that reveal the consistent strategic functions of the tactics. Tactical shifts are thus driven by strong higher-level consistency; the active goal and the state of the system has not changed, but the opportunities and constraints that the person perceives in the situation leads them to switch tactics to continue working toward their strategic goal using different means.

***If . . . Then . . .* Profile Variation: Strategic Shifts**

We define *strategic shifts* as *if . . . then . . .* profiles that result when a person switches from one strategy to another

in their pursuit of valued goals (e.g., a strategy of eagerly approaching success versus a strategy of vigilantly avoiding failure). Strategic shifts allow a person to react to old situations in new ways, as various tactics will have new strategic functionalities under the new strategy (e.g., approaching risky opportunities for advancement would be functional under an eagerness strategy but not functional under a vigilance strategy). Unlike tactical shifts, which are likely to be observed when the situation affects the strategic functionality of the tactic without affecting variables at higher levels in the goal system, strategic shifts are most likely to occur when the situation has reoriented goals at the system level. For example, a situation might change the system-level goal from a focus on desired end states to a focus on undesired end states (Carver & White, 1994), from a concern with advancement to a concern with security (Higgins, 1999b), from a focus on internal experiences to a focus on external contingencies (Deci & Ryan, 2009), and so on. When a person’s system level goal is in a different orientation, an entirely different strategy with a host of new tactics may quite naturally emerge from the person, even if these tactics would rarely be seen in other circumstances (e.g., “if advancement concerns are most accessible, then activate an eagerness strategy and its associated tactics; if security concerns are most accessible, then activate a vigilance strategy and its associated tactics”).

Research in the achievement domain suggests that implicit theories are system variables that influence the adoption of performance versus learning strategies (Dweck, 2008; Dweck & Grant, 2008; see Figure 8.5). When people focus on the possibility that intelligence can be improved (a “growth” or incremental theory), their achievement system goal becomes oriented around improvement concerns, which activates a learning strategy. When people focus on the possibility that intelligence may be fixed (a “fixed”

or entity theory), their achievement goal becomes oriented around demonstration concerns, which activates a performance strategy. Situations that draw attention to the opposing theory (e.g., reading an article about environmental versus genetic contributions to intelligence, Dweck & Leggett, 2000) can change the accessibility of these two viewpoints enough to shift the achievement goal strategy (“if I think about how intelligence is fixed, then I pursue a performance strategy; if I think about how intelligence can grow, then I activate a learning strategy”). The achievement subdomain itself can be a situation that changes the accessibility of a growth or fixed theory. A person may, for example, pursue a performance strategy with its associated tactics in school, but may pursue a learning strategy with its associated tactics in music or art lessons, if a person holds a different theory of ability for the two domains. How would this strategic shift be manifested in behavior? The person should display a noticeably different response to failure in the two domains, and this is not a surface inconsistency but rather a deep one—the orientation of the person’s system goal is quite different from one domain to the other.

Turning to attachment theory, research suggests that mental models of others are system variables that influence the activation of secure, anxious, or avoidant strategies in a relational goal system (Shaver & Mikulincer, 2009). When people believe that others will not be responsive to their needs, their relatedness goal orients toward autonomy-protection concerns, which activates the dismissive strategy. When people believe that others will be inconsistently responsive to their needs, their relatedness goal orients toward connection-protection concerns, which activates the vigilance strategy. When people believe that others will be responsive to their needs, their relatedness goal orients toward advancement concerns, which activates the trusting strategy. Individual differences in the chronic accessibility of each mental model lead to individual differences in chronic goal orientation and strategic preference.

Nevertheless, particular situations may activate any one of the three mental models, which can shift the goal orientation and the pursuant strategy. Thus, someone who typically pursues anxious strategies may activate trusting strategies in a particular relationship with a person who they perceive to be consistently responsive, and someone who typically pursues secure strategies may activate anxious strategies in a particular relationship with a person who they perceive to be inconsistently responsive (Bartz & Lydon, 2008; Davila & Kashy, 2009; Fraley, Hefferman, Vicary, & Brumbaugh, 2011). These strategic shifts

reflect pervasive changes in the state of the motivational system and the associated spreading activation to strategies and tactics (“if I perceive that a relationship partner is inconsistently responsive, then I activate an anxious strategy; if I perceive that a relationship partner is reliably responsive, then I activate a secure strategy”). Thus, the same individual may appear to be “a different person” in one relationship versus another, and this perception is in some sense entirely accurate, in that the individual’s behavior is coming from a fundamentally different place at the system level.

The tri-level theory of self-regulation (Scholer & Higgins, 2008) draws attention to the distinction between tactical and strategic shifts in behavior. Tactical shifts represent changes in the low-level selection of means given the perceived opportunities and constraints of the situation, whereas strategic shifts represent more pervasive changes at all three levels of the goal hierarchy. Thus, tactical versus strategic *if...then...* profile variation in response to situations represents differing amounts of change in the goal system as a whole: Tactical shifts illustrate low-level variation with underlying strategic consistency, and strategic shifts illustrate variation that is produced by meaningful and pervasive changes in the activation of goals and related cognitions from the highest to lowest hierarchical level.

Implications of a Functionalist CAPS Framework

Our approach suggests that when one takes seriously the idea that behaviors serve functions, superficial and simple evaluations of behavior are not sufficient for capturing personality. What looks similar on the surface can actually be quite different. And superficial differences may reveal deep similarity. This is true both within and between people; acknowledging these dynamics provides a framework for thinking about how to better understand persons. Echoing others, we believe that a behavior cannot be understood without knowing the strategy that drives it. Likewise, knowing an individual’s strategic orientation is critical for discerning higher-level system variables. Is a risky choice a reflection of creativity or desperation? Is withdrawal a signal of anger or reflection? Personality is involved at all levels; comprehensive person perception must involve all three.

This does not simply lead to more accurate person perception, but has significant implications for personality change. Trying to change a behavior without considering the function the behavior serves is likely a futile effort. If you take away an avoidant person’s hostile responses

to neediness, how will that person protect autonomy? Is a rejection sensitive person really going to be able to just “let go” of their anxious expectations of rejection? Probably not. However, some tactics are more effective for general well-being and growth than others. Hostility may be functional for avoidant individuals because it protects their autonomy, but it is not functional for all goals—certainly not for building close relationships. By introducing a new tactic that serves the same strategy in a more optimal way (e.g., trying to get an avoidant person to offer a needy romantic partner autonomy support rather than trying to get them to offer instrumental support), individuals may be more open and able to adopt new behaviors. For the avoidant individual, for instance, this more adaptive tactic may be less likely to sabotage relationships. Over time, such tactical changes may profoundly influence people’s well-being.

It is also possible to consider a top-down approach to personality change, using system changes that will themselves pull for a corresponding and cascading set of strategies and tactics. An individual who continually disengages from challenging situations may be doing so because of their concerns with demonstrating their abilities. Recognizing that their disengagement stems from system level beliefs that intelligence is immutable suggests the possibility of an intervention at the highest level. If an individual can be shown that abilities are mutable, they are likely to focus on improvement, with disengagement giving way to engagement. We don’t suggest that such changes are always (or ever) easy. We do suggest, however, that understanding where in the hierarchy to target an intervention—and how that intervention will affect other levels—is critical.

We began by suggesting that a comprehensive personality theory should serve three goals, providing insight into personality prediction, explanation, and dynamics of interpersonal influence. From its inception, CAPS made great strides in advancing all of these goals and in so doing, fundamentally changed the way personality itself was conceptualized. The functionalist approach to CAPS, we believe, is an even more powerful tool. Early work in CAPS focused on understanding psychological meaningful “ifs.” The functionalist approach we have taken here highlights differences in psychologically meaningful “thens” as well. Not all “thens” are equal; tactical shifts may in fact highlight strong strategic consistency, whereas strategic shifts may reveal high-level changes. Continued exploration of these dynamics has the potential to deepen and broaden our understanding of personality.

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