Personality in Context: An Interpersonal Systems Perspective

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ABSTRACT Because a significant part of individuals' lives involve close relationships, an important and substantial part of the situations they encounter consists of other people's behaviors. We suggest that individuals' characteristic ways of behaving, which are typically attributed to "personality," arise from two processes. One lies primarily within the individual, conceptualized as individual differences in one's cognitive and affective processing system. The other process, which has received less attention in personality research, lies outside the person in the individual differences in the situations that people encounter in their everyday lives. The interplay between these two processes can be particularly relevant for understanding close relationships. By assuming that each partner's behavior provides the situational context for the other partner, we conceptualize a dyadic relationship as the "interlocking"

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of the cognitive-affective processing systems of both partners. We illustrate this approach to personality-in-context with a hypothetical scenario and use this framework to organize research on attachment styles, rejection sensitivity, self-fulfilling prophecy, the self in relation to others, and interdependence theory.

The original goal of the present paper was to address the question: What do interpersonal relationships tell us about personality? However, the paradoxical nature inherent in the question itself soon became apparent. Does "personality" even exist without an interpersonal context, real or imagined? It seemed to us that many of the qualities usually attributed to "personality" (e.g., frequency of exhibiting a particular behavior) reflect not an individual in isolation, but an individual within interpersonal relationships. This realization is, of course, not new or unique. In fact, the idea that an individual's behavior at any given moment arises from interactions within the interpersonal systems of which she is a part has been repeatedly voiced by cultural psychologists (e.g., Gergen, 1973, 1990; Sampson, 1977, 1978; Shweder, 1991; Sullivan, 1984), and by George Herbert Mead and the symbolic interactionists (e.g., Mead, 1934, 1938; Cooley, 1922). Similarly, developmental psychologists and self theorists believe that the self and all of its diverse aspects, emotional, cognitive, and behavioral, are constructed, enacted, and maintained in the context of social relationships (e.g., Vygotsky, 1978; also see Mischel & Morf, in press; Athay & Darley, 1981; Hoyle, Kernbis, Leary, & Baldwin, 1999; Markus & Cross, 1990). The unifying theme among these historical and current perspectives is that human behaviors commonly attributed to the individual are inseparable from the contexts in which they occur: Some behaviors may not be meaningful or even observable without placing individuals within contexts, particularly those that involve interpersonal relations.

Building on these traditions, a central assumption of the present article is the idea that each person within a close dyadic relationship makes up a significant part of the other person's situation. Drawing on basic principles from recent social cognitive conceptualizations of personality and human information processing, we explore the implications of this key aspect of dyadic relationships and suggest that behaviors normally attributed to "personality" arise out of the interactions between the individual and relational contexts, rather than from the qualities of each individual alone. Specifically, we discuss

how two individuals might create a dynamic and continuously interactive interpersonal system, within which the personal characteristics unique to each person are embedded and from which each person's behaviors, as well as the behavioral patterns of the dyad, emerge. We then illustrate this personality-in-context approach with a hypothetical scenario and use it as a framework to organize the literature on selected topics within the study of personality, social processes, and close relationships. Finally, we discuss implications of the personality-in-context framework to past and future theory and research, as well as implications for enduring personality change.

Interpersonal Contexts: Confound, or an Integral Part of Personality?

Controlling the Effect of Situations to Study Individual Differences in Behavior

Regardless of particular tradition, behavior has long been conceptualized as a joint function of individual characteristics and situational influences. For example, Lewin (1935, 1951) proposed the equation $B = f(P, E)$ to describe how behavior (B) is a function of the person (P) and his or her environment (E). This conceptualization has implicitly influenced the assumptions that have guided research on personality and individual differences. While some psychologists have investigated the effect of situations on behavior, focusing on the E of the Lewinian equation, others have investigated the role of personality and individual differences on behavior, focusing on the P in the $B = f(P, E)$ equation. For instance, studies on personality and individual differences typically have involved exposing all participants to the same set of stimuli. Alternatively, when it has not been possible to expose participants to the same set of situations, psychologists have removed the effect of situations by statistically averaging observations of behaviors across situations. The goal of both of these approaches, therefore, has been to focus on the role of P in the Lewinian $B = f(P, E)$, while holding E constant. Few personality psychologists would doubt that behavior arises from the interplay between the person and his or her environment. In practice, however, the basic assumption guiding research has been that, in order to study the P in the $B = f(P, E)$ equation, the powerful effect of situations has to be held constant or controlled, lest it would be

impossible to know whether differences in behaviors have been caused by features in the situation or enduring characteristics of the person. These approaches have ensured that differences in behaviors have not been "confounded" with differences in situations (e.g., Ross & Nisbett, 1991; Snyder & Ickes, 1985).

Bringing the E Back Into the B = f(P, E) Equation: Individual Differences in Environments Encountered

Should the situations that individuals encounter always be controlled, as is the case within laboratory studies or when researchers average across situations? Might some important information be lost by doing so? The situations individuals encounter in their real-world, everyday lives are almost certainly not the same for everyone, but differ systematically (e.g., Emmons, Diener, & Larsen, 1986; Snyder & Ickes, 1985; Buss, 1984, 1987; Caspi & Herbener, 1990). That is, just as individuals differ in their internal characteristics (*P*), they are also likely to differ in the environments (*E*) that they typically encounter in their lives. Therefore, we suggest that controlling the effect of situations, paradoxically, may exclude a critical component of individual differences in behaviors.

The situations that people encounter, both in the immediate and distant future, are influenced, in part, by their actions: Individuals select some situations over others, manipulate their social environment, and evoke predictable responses from other people, thereby creating and shaping the situations that they will encounter (e.g., Buss, 1987). For example, an individual might have a tendency to speak up, especially when she disagrees with the majority view, or might have a preference to go out to a party rather than read a book. Both of these behavioral tendencies (e.g., expressing disagreement, choice of evening activity) will undoubtedly affect the situations he or she is likely to encounter next, which, in turn, may affect what the person feels, thinks, and does subsequently. Thus, *individual differences in situations* are likely to play a critical role in producing observable, stable, individual differences in behaviors (Caspi & Herbener, 1990), which, starting the process anew, may further promote differences in the situations encountered. It is also possible that these processes by which individuals shape their social world become increasingly more powerful and influential as individuals mature and gain more autonomy (Plomin,

1986; Scarr, 1988: Scarr & McCartney, 1983). This assumption is consistent with increases in intraindividual stability of personality with age (Caspi & Bem, 1990). Furthermore, adding another layer of complexity, individual differences in situations encountered (*E*) and individual differences in personal characteristics (*P*) may become increasingly intertwined, resulting in person-situation linkages. For example, intuitive prototypes of people are often characterized by the typical situations associated with them, such as extraverts are associated with (Cantor, Mischel, & Schwartz, 1982). In sum, although observable behaviors are traditionally viewed as arising from stable, internal characteristics of the person, we suggest that individual differences in the situations people encounter are another equally important process contributing to stability and coherence of behaviors.

Modeling the Dyadic System Using the Cognitive-Affective Processing System (CAPS) Conceptualization of Individuals

Currently, the conceptual tools available in psychology are primarily designed to understand a person (Reis, Collins, & Berscheid, 2000). However, to the extent that each member of a dyad plays a key role in creating the situation for the other member, we may apply these tools to model a significant part of the situation, or *environment* in the Lewinian equation.

P_1 and P_2: Modeling the Cognitive-Affective Processing System (CAPS) of Each Member of the Dyad

How does one model the "mind" of a person, that is, the *P* in the $B = f(P, E)$ equation? First, the model needs to incorporate, rather than exclude, the effect of situations. Second, the model should account for why the effect of situations are not the same for all individuals by addressing differences in how people respond, cognitively, affectively, and behaviorally, to situations. Third, the model has to allow for a process in which individuals' behaviors influence the types and frequencies of situations they encounter in their lives. One theoretical framework that addresses these requirements is the Cognitive-Affective Processing System (CAPS) theory of personality (Mischel & Shoda, 1995; Shoda & Mischel, 1998; Shoda, LeeTiernan, & Mischel, 2002).

Each person's CAPS network. As shown in Figure 1, CAPS conceptualizes the "mind" of each member of a dyad, P_1 and P_2, as a distinctive network of interconnected cognitions and affects (referred to as each person's CAPS network). The CAPS approach draws from existing principles of social cognition, such as, availability and accessibility of social constructs (e.g., Bruner, 1957; Higgins & King, 1981). Individuals' CAPS networks are expected to differ in the availability of specific cognitions or affects, as well as in the pattern and strengths of the associations among the cognitions and affects, which determines the ease with which they are activated (i.e., accessibility). Each person's CAPS network mediates the relationships between the situations a person encounters and his or her behavioral reactions to the situations by guiding how a person construes and interprets the situations and the cognitions and affects that become automatically activated.

If . . . then . . . situation-behavior relationships. One implication of the CAPS approach is that an individual's distinctive and stable network of cognitions and affects underlies distinctive and stable observable *if . . . then . . .* relationships between features of situations and behavioral responses. These *if . . . then . . .* situation-behavior relationships are assumed to describe uniquely the consistency within a person's behavioral variability across situations. To elaborate, although the internal organization of each person's cognitive-affective processing system itself remains relatively stable and invariant from situation to situation at least in the short term, the particular thoughts and affects activated at a given moment change, depending on the situational input that activates them. Thus, the stable structural properties of the cognitive-affective processing system guide the dynamic activation (within the network) of particular cognitions and affects in a given situation. In turn, different sets of cognitions and affects lead to different behaviors. To the extent that a person encounters situations with similar features, the same CAPS subnetwork will become activated, generating similar behavioral responses. What results are distinctive and stable observable *if . . . then . . .* relationships between features of situations and behavioral responses unique to each individual.

The "Interlocking" of Two CAPS Networks: The Dyadic System

Individuals rarely live in isolation. Indeed, a significant part of individuals' lives involves the relationships that they develop with

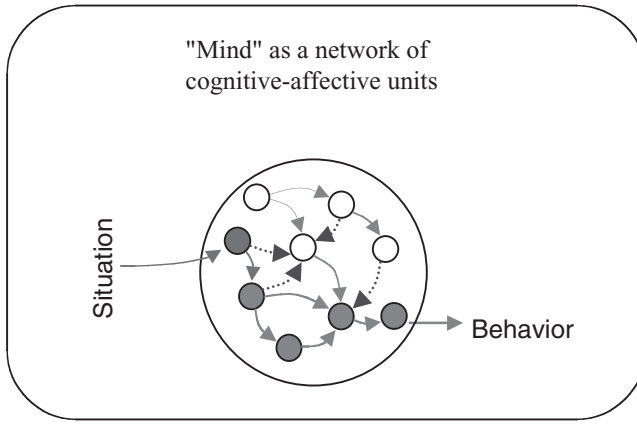

Figure 1

The large circle in the figure above represents a person's mind as conceptualized as a *Cognitive-Affective Processing System* or *CAPS network*. Each person's CAPS network consists of a stable and unique network of cognitions and affects, which differs from that of another individual in the pattern and strengths of associations between concepts. The circles within the person's CAPS network represent all those cognitions and affects *available* for the processing of information. The darkened circles represents those thoughts and affects that are currently activated (i.e., highly *accessible*), while the undarkened circles represent those thoughts and affects that are not activated or accessible. The lines among the concepts indicate which concepts are connected with one another, and the strength of association, within a person's CAPS network. If there is a line, the concepts are assumed to be associated (i.e., activation of one concept results in the activation of the associated concept), and the thickness of the line reflects the strength of the association. If there is no line between two concepts, then the concepts are assumed to be *un*associated. In addition, the lines between concepts represent *how* concepts are connected with one another: Solid lines indicate that the activation of one concept *facilitates* activation of the associated concept, and dashed lines indicate that the activation of one concept *inhibits* activation of the associated concept. In the figure, features of the situation are assumed to activate the available, and relevant, cognitions and affects within the person's CAPS network and this activation is assumed to propagate through the network of association, and ultimately influences individual's subjective experiences and behavioral response.

other people. Thus, people and their behaviors are undoubtedly a significant part of situations. Although one person's behavior is likely to influence the behavior of another person regardless of the nature of the relationship between the two individuals, close intimate relationships, particularly those that involve romantic partners, may differ in important ways from nonintimate relations.

$E = f(?)$: One partner's behavior is a significant part of the other partner's situation, and vice versa. As an individual develops a close relationship with another, the frequency of interactions and exposure to the partner's behaviors increases, creating many more opportunities for one person's behavior to influence the other person. In addition, as two individuals grow closer, they become more invested in the relationship, and the psychological significance of the interactions and partner's behaviors is also likely to increase. Thus, in close, intimate relationships there is a greater likelihood that behaviors of one's partner are more likely to be noticed and encoded, and consequently more likely to affect behavior.

It seems reasonable to assume that as close relationships develop, particularly those that involve romantic partners, the thoughts, feelings, and behaviors of one partner come to matter more, and a large and integral part of one partner's environment is the behavior of the other partner. Substituting the E in the Lewinian equation with the respective partners' behavior, the behavior of one partner (B_1) emerges from the interaction between her "mind" (P_1) and the situational input provided primarily by her partner's behavior (B_2), hence $B_1 = f(P_1, B_2)$. Similarly, the behavior of the other partner in the dyad (B_2) can be conceptualized as a function of the interaction between his "mind" (P_2) and the situational information provided by his partner's behavior (B_1), hence $B_2 = f(P_2, B_1)$.[1] To the extent that one person's environment consists primarily of his or her partner's behaviors, this in turn allows us to model the environment. That is, the environment encountered next (E_1) can be thought of, at least in part, as a function of one's own behavior (B_1), as well as the "mind"

1. We use the term "behavior" broadly defined, including a person's physical appearance, social status, etc., which are not strictly what the person "does," but nonetheless are a part of the situational stimuli.

of one's partner (P_2), which interprets, encodes, and ultimately responds (B_2) to one's initial behavior. Thus, $E_1 = f(P_2, B_1)$, and $E_2 = f(P_1, B_2)$.

Dyadic system. How does a dyadic system develop between two individuals? As discussed above in the brief description of the CAPS approach to personality, situations with similar features tend to activate the same CAPS subnetworks, which in turn are expected to generate similar behavioral responses. This idea, in conjunction with the assumption that in close relationships the behavior of one partner is the situational input for the other, is particularly relevant for understanding the formation and development of dyadic systems. If one partner's behaviors are relatively consistent over time (e.g., one person tends to give the silent treatment when in conflict), then in effect the other partner will be repeatedly exposed to situations that involve similar features, which in turn will repeatedly activate a specific subset of cognitions and affects in her CAPS network (e.g., when her partner gives her the silent treatment, she feels a need to "draw out" her partner and get closer). Over time the particular cognitive-affective dynamics that become activated in one partner in response to the other partner's specific behaviors may become increasingly more accessible and may in future interactions start to become activated with minimal behavioral input. Furthermore, as a relationship develops, each partner is learning (implicitly or explicitly) about how her partner behaves in different situations, and in a sense, begins to develop a mental representation of the partner (e.g., "he's a loner"). Once this representation is formed, an individual may be more likely to engage in top-down, schema-driven processing (rather than bottom-up, stimulus-driven processing), and consequently, may interpret the behaviors of her partner as consistent with the schema.

To summarize, to the extent such a dyadic system is formed, one partner's behavior is expected to repeatedly and predictably activate certain subsets of thoughts and affects within the other partner's CAPS network, leading to a particular behavioral response. In turn, the resulting behavioral response serves as the situational input of the other partner, and the process continues anew. Eventually, stable and predictable behavioral interaction patterns between the two members of the dyad should become established, and the CAPS networks of both partners may in effect become functionally

"interlocked," forming a dynamic and continuously interactive dyadic system.[2]

Furthermore, the model we propose predicts that patterns of interactions that emerge will be unique to each dyadic *system*. For example, the impact of specific behaviors (e.g., partner giving the silent treatment) may depend on how the behaviors are interpreted in the context of the other thoughts and affects that are activated in the perceiver's CAPS network, which are likely to involve the mental representation of their partner (e.g., Sandra uses the silent treatment when her feelings have been hurt, but Lisa uses the silent to get her way). Thus, because the personality-in-context framework assumes that each relationship partner provides the other partner with a unique set of situations (i.e., behaviors), the behaviors of each individual and the interactions that emerge from a dyadic system should be expressed differently as a function of the specific relationship. This possibility was recently demonstrated by a computer simulation of a dyadic system consisting of two CAPS networks (Shoda, LeeTiernan, & Mischel, 2002).

Stable and Predictable Interaction Patterns Arise From Ever-Changing Activation of Cognitions and Affects

What aspects of the *dynamic* dyadic system are stable and predictable? The resulting dyadic system is dynamic in the sense that the specific cognitions and affects that become activated within the CAPS network of each person of the dyad, as well as the observable behaviors that each CAPS network produces, are not constant, but vary from moment

2. For the purpose of illustrating the key ideas of the personality-in-context approach, we have focused on the simplest instances, those in which one partner's behavior activates a particular cognitive-affective dynamic in the other partner's CAPS network, which in turn leads to that partner's behavior. Dyadic systems, however, are likely to involve parallel pathways, such as when multiple behaviors activate multiple cognitions and affects. Thus, behavior is likely to be multidetermined with several simultaneously operating pathways contributing to the emergence of predictable and stable behavior interactions. In addition, pathways that lead to a behavior may not always include every step discussed. For example, if a person engages in a particular behavior, the simple act of engaging in the behavior may make certain thoughts in their CAPS network more salient, without requiring a response by the partner. Although there are many complexities to the more general model of dyadic systems that we are proposing, throughout the paper we choose to focus on the simplest case in order to describe the key assumptions.

to moment depending on the situational input. The stable aspects of the dyadic system (i.e., "interlocked" CAPS networks) are expressed in terms of predictable and stable interaction patterns that emerge amid what appears to be the ever-changing activation of cognitions and affects.

What is the nature of E? The term *environment*, or *situation*, may conjure images of static and impersonal physical settings. However, the most significant aspect of *E*, psychologically speaking, is likely to be inherently dynamic and changing, because in all likelihood it will consist of other people, whose very nature is dynamic. Thus, by conceptualizing *E* as consisting, in large part, of the behaviors of one's partner, the environment is itself a living thing—something that is continuously changing, personal, active, and reactive. In addition, to facilitate discussion of the personality-in-context approach, we refer to the immediate set of situational information, or "stimuli," to which a person is exposed (regardless of whether a person is consciously aware of the stimuli) by *E*. Note that we distinguish *E* from aspects of the partner that are relatively stable and enduring (e.g., CAPS network) and that give rise to the ever-changing flow of situational input.

Personality-In-Context Approach for Modeling Dyadic Systems: A Hypothetical Scenario

In the section that follows, we illustrate a personality-in-context approach by considering a hypothetical scenario. For the purpose of clarity, the illustration is divided into phases. *Phase 1* describes the two key processes at work when individuals are not yet a part of a dyadic system: Each person's stable *intra*individual cognitive-affective processes modeled as a CAPS network, and *inter*individual processes that generate stable individual differences in situations encountered. *Phase 2* part of the hypothetical scenario illustrates how, when two individuals interact over time, these two processes (i.e., *intra*individual and *inter*individual) work conjointly to form a dyadic system between the individuals. That is, *Phase 2* illustrates how a dyadic system develops between two individuals via an "interlocking" of their CAPS networks, wherein each person in the dyad provides the situational input for the other. Finally, it shows how the stable behavioral interactions of a dyad, as well as each person's behaviors, emerge from such a dyadic system.

Hypothetical Scenario

Suppose that, during the first day of his seminar, a student named Mark is briefly introduced to two other students, Sydney and Jane. Mark finds them both attractive. After class one afternoon, when both Sydney and Jane are present, he mentions, as if thinking out loud, that it might be fun to go to a coffee shop to study together.

Phase 1, intraindividual processes: Seeing the situation through a CAPS network: Encoding the psychological meaning of situations. A key assumption of our personality-in-context approach is that Mark's behavior constitutes a significant part of each woman's situational input. However, as shown in Figure 2, the psychological meaning of the situation (i.e., Mark's behavior) will differ, depending on each woman's cognitive-affective system (i.e., CAPS network), which, in turn, influences her subjective experience and behavioral response to Mark.

To elaborate, suppose that Sydney's CAPS network is such that situations in which she feels self-aware activate in her thoughts that she is unworthy of affection and that rejection by others is inevitable sooner or later. These thoughts, in turn, may lead Sydney to think that the invitation to coffee was not extended to her personally because she was not asked explicitly. She may, instead, readily conclude that Mark is interested in Jane, encoding his behavior as a rejection of her. These thoughts and affects, activated within Sydney's CAPS network, are likely to influence Sydney's behavioral response to Mark's invitation. Feeling hurt and unwanted, she may, for instance, make a cynical remark to Mark or act dismissive and aloof.

Suppose that, in contrast to Sydney, whenever Jane is made self-aware, thoughts that she is likeable and that others are accepting become accessible. Thus, although Mark's invitation is somewhat ambiguous, Jane may still automatically assume that she is one of the people invited. The thoughts and affects activated, in turn, will influence Jane's behavioral response to the situation. For instance, Jane may behave in a manner that is warm and shows interest in Mark.

Phase 1, interindividual processes: Cognitive-affective processes influence situations encountered: $E_1 = f(P_2, B_1)$. How will Mark respond to each woman? First, as suggested by the original Lewinian equation, $B = f(P, E)$, Mark's subsequent behavioral response will depend on the interpersonal situation. Just as Mark provided the

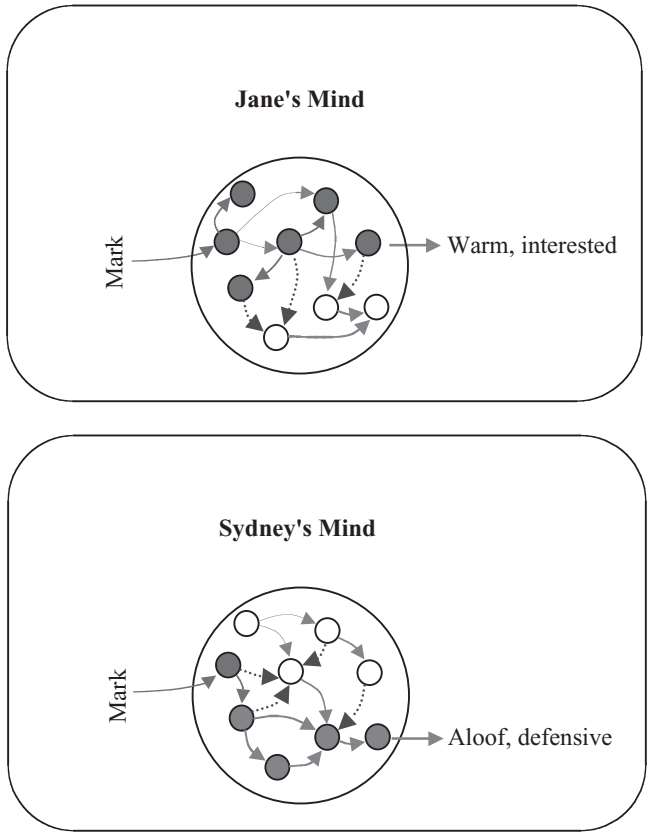

Figure 2
Sydney and Jane encounter the same situation, which in this example consists of Mark and his behaviors. Because of each woman's unique CAPS network, the thoughts and affects that become activated as a result of the situation are expected to differ, which, in turn, leads each woman to behave differently towards Mark.

situational input for Sydney and Jane, now, each woman's behavioral response to the initial invitation serves as Mark's new situational input. As shown in Figure 3, because each woman is providing Mark with a different set of situational inputs (Sydney by her cynicism, and Jane by her warmth), the cognitions and affects activated within Mark when he interacts with Sydney differ from the cognitions and affects activated when he interacts with Jane. Subsequently, Mark's behavior toward each woman will also differ.

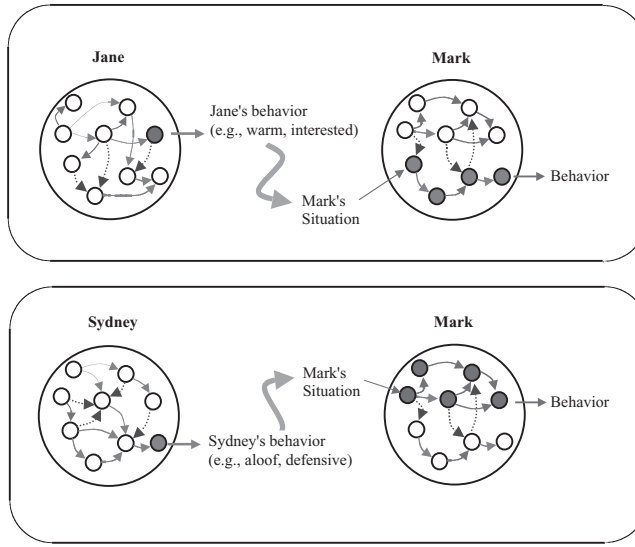

Figure 3
Although Mark's CAPS network is the same regardless of whether he is interacting with Jane (top panel) or Sydney (bottom panel), the cognitions and affects that become *activated* within his network (i.e., the particular cognitive-affective dynamic) does differ depending on which woman he is interacting with. As a result, Mark's behaviors are also expected to differ as a function of his interaction partner.

A second factor affecting Mark's behavioral response to each woman is his unique CAPS network. Imagine that Mark's CAPS network is such that he perceives Jane's warmth and interest as fawning and possibly insincere, but finds Sydney's cynicism and aloofness as challenging and compelling. Mark may even be particularly attracted to women who appear distant and emotionally reserved. Thus, although people on the whole may find it more pleasant to interact with Jane than with Sydney, the particular network of cognitions and affects that makes up Mark's CAPS system may lead him to approach Sydney more than Jane, despite her negative behavior. Conversely, from Sydney's perspective, her personal characteristics may be such that she is likely to attract suitors, who, like Mark, have particular qualities or CAPS networks. Thus, Sydney's personal characteristics may unintentionally be attracting particular individuals.

The process we have outlined illustrates at least three ways, namely selection, evocation, and manipulation, through which one's behavior

may shape and create their social world (Buss, 1987). First, individuals select the situations that they are likely to encounter in their real world by seeking out some situations and avoiding others. For example, if Sydney ultimately chooses not to go with Mark to the coffee shop, whereas Jane readily accepts the offer, each woman is selecting the types of situations that she is likely to encounter in the future. Similarly, if Mark decides to continue to get to know Sydney rather than Jane, he, too, will be influencing the situations that he is likely to encounter in the future. In addition, individuals also influence their social world, unintentionally by virtue of enduring personal characteristics (i.e., evocation), as well as intentionally, by behaving in ways that provoke consistent and predictable responses in others who are present in the environment (i.e., manipulation). Thus, intentionally or unintentionally, each woman's behavior (i.e., Sydney's cynicism and Jane's warmth) in response to Mark's initial comment affects her social world. In the above illustration, although Sydney's interpersonal style of emotional distance and aloofness may attract individuals with particular interpersonal styles, goals, and motives, such as Mark, Sydney's defensiveness will more often than not predictably elicit unfavorable reactions from others.

In sum, each woman's environment (E_1) can be conceptualized as a function of her own behavior (B_1) and how Mark is likely to respond to her behavior, which is determined,for the most part, by his own CAPS network (P_2). That is, $E_1 = f(P_2, B_1)$. Likewise, Mark's environment can be conceptualized as a function of his own past behavior and how each woman is likely to respond to it, which is determined, for the most part, by each woman's unique CAPS network.

Phase 2: The Dyadic System

Let us consider what might happen if Mark and Sydney end up dating more seriously. As shown in Figure 4, over time, a stable dyadic system may develop whereby the CAPS networks of the two individuals become "interlocked," thus generating predictable interaction patterns. To illustrate, suppose that conflicts or disagreements with Mark activate in Sydney thoughts and feelings associated with rejection, similar to those that characterized her initial reaction to Mark. Sydney may, for example, interpret conflict to mean that Mark really does not care for her. These feelings of rejection may lead her to become withdrawn, distant, and defensive. Over time, Sydney's stable

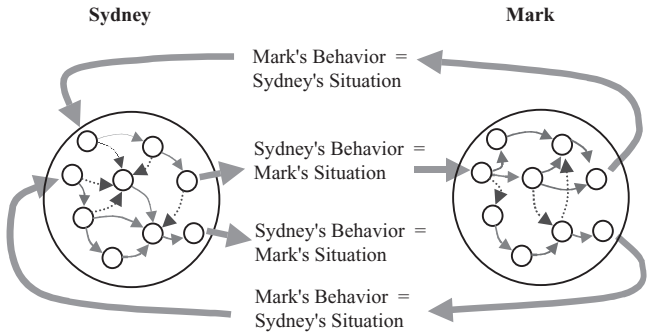

Figure 4
As individuals develop a relationship, the CAPS networks of each partner become "interlocked" so that the significant part of the situations encountered by one partner consists of the behaviors of the partner, and vice versa. In the hypothetical scenario, Sydney and Mark have begun to form a relationship. The resulting a dyadic system which consists of Sydney's and Mark's CAPS networks begins to become interconnected in such a way that the behavioral output from Sydney's CAPS network, becomes Mark's situation. This situation, in turn, is the input that activates a particular cognitive-affective dynamic in Mark, leading to Mark's behavior. Similarly, the behavioral output from Mark's CAPS network becomes Sydney's situation, which in turn, activates in Sydney a particular cognitive-affective dynamic, leading to her behavior. In this manner, a dyadic interpersonal system starts to develop, and once formed may account for consistency and stability within interpersonal relationships.

cognitive-affective dynamics in response to conflict (e.g., *if* conflict *then* withdrawal) may create a situation in which Mark also becomes worried and concerned after a conflict or disagreement. For example, he may interpret Sydney's distant behavior as a reflection that she does not really care about him. If Mark tries to respond to this situation (i.e., Sydney's withdrawal) by attempting to "draw out" Sydney, a recurrent interaction pattern may emerge over time—one that involves Mark approaching and Sydney withdrawing.

Taking Stock

Several points about the above illustration are worth highlighting. First, the scenario illustrates the CAPS theory approach to

personality (*intraindividual processes* of *Phase 1*, above). Specifically, it shows how the same interpersonal situation—a situation consisting of an invitation, albeit an ambiguous one, activated a different pattern of cognitions and affects in each woman, leading them to perceive, interpret, and respond differently to the situation. Second, the hypothetical scenario illustrates how individuals (i.e., Sydney and Jane) are able to shape their interpersonal world by the behaviors they elicit in others—the situations they attract, as well as the situations they choose to be in (*interindividual processes* of *Phase 1*, above). These processes may create self-fulfilling prophecies. For example, even though there will be variability in various individuals' reactions when interacting with a defensive person such as Sydney, on average, people enjoy interacting with a nondefensive person more than a defensive person. This general tendency increases the chance that Mark will, in fact, not like Sydney, reinforcing her preexisting view of herself as unworthy and of others as rejecting. Finally, the illustration shows how a stable interaction pattern between two people develops, emerging out of the stable cognitive-affective processing systems of both individuals (*Phase 2,* above). Note how Mark's behavior might have been drastically different if he pursued a relationship with Jane instead of Sydney. It is likely that his behaviors, although he is still the same person, with his own unique qualities (e.g., CAPS), would be very different from those in a relationship with Sydney. Thus, the same individual can display quite different, but equally stable, behaviors when in the context of different relationships that provide a different set of situation inputs.

Relevant Research Illustrating Personality-In-Context Approach and the Formation of Dyadic Systems

As illustrated by the example above, if a person's "mind" is conceptualized as a stable cognitive affective processing system, it becomes possible to model the interpersonal aspects of our environment and address reliable individual differences in situations encountered. Such a conceptualization may also help build a framework from which the field of personality and interpersonal relationships can begin to unify seemingly disparate approaches and research findings. Indeed, there has been a call for a unifying model of

personality that elucidates both the intraindividual psychological processes, as well as the interindividual dynamics within close relationships (see Reis, Capobianco, & Tsai, this issue).

In the section that follows, our goal is to show how various approaches and research findings, ranging from work on attachment styles and interdependence theory to self-fulfilling prophecy, can be organized and integrated using the model of personality-in-context that we propose. Similar to the illustration, we have divided the literature review into parts for the purpose of clarity. *Phase 1*, *intraindividual processes* reviews research on stable *intra*individual cognitive-affective processes. *Phase 1*, *interindividual processes* examines studies on *inter*individual processes that generate stable individual differences in situations encountered. Finally, *Phase 2* assesses the research being conducted on behavioral interactions that emerge from dyadic systems.

Intraindividual Processes: Seeing the Situation Through a CAPS Network: Encoding the Psychological Meaning of Situations

Recent approaches to personality and individual differences (Baldwin, 1992, Baldwin, Fehr, Keedian, Seidel, & Thomson, 1993; Greenwald, Banaji, Rudman, Farnham, Nosek, & Rosier, 2000; Baldwin & Meunier, 1999; Mischel & Shoda, 1995) are highly consistent with the phenomenon illustrated in the hypothetical scenario thus far. These recent approaches conceptualize each person's mind as a stable pattern of automatic associations between specific cognitions and affects. Because the pattern and strengths of automatic associations among cognitions and affects within a person's network are hypothesized to reflect a lifetime of experiences as well as genetic makeup, such approaches are highly consistent with several theories of individual differences in interpersonal behaviors, such as relational schemas, adult attachment theory, and model of rejection sensitivity.

Of particular importance is Baldwin's (1992) conceptualization of *relational schemas*. Consistent with earlier theorists who stated that people notice how others respond to them and internalize these responses into self-concepts (Cooley, 1902; Mead, 1934), Baldwin defines relational schemas as "cognitive structures representing regularities in patterns of interpersonal relatedness" (p. 461). These structures include representations of self-in-interpersonal-relationships, representations of others-in-interaction, and interpersonal scripts for the interaction pattern. In addition to being cognitive structures,

however, relational schemas also include affective reactions (e.g., Brennan & Shaver, 1995; Downey & Feldman, 1996; Hazan & Shaver, 1987)—feelings about self-in-interpersonal-relationships, about others-in-interaction, and about the interpersonal scripts that guide behaviors within close relationships. Thus, relational schemas can be conceptualized as a particular configuration of cognitions and affects about the self and significant others in interactions that become activated by relevant relationship situations. This approach to relational schemas is highly consistent with the CAPS approach to personality and provides a fruitful place to start outlining the links between our personality-in-context model and the existing literature.

Individual differences in relational schemas. Attachment theory provides an illustration of research and theory on individual differences in relational schemas. Adult attachment theory assumes that, through repeated interactions with a primary caregiver, an infant develops a general attachment representation—a mental model, or "map" of oneself and one's social world. Although attachment representations are assumed to consist, for the most part, of automatic nonconscious cognitive and affective processes (Bowlby, 1969; Crowell & Treboux, 1995), such processes have been shown to affect a wide range of responses, including conscious judgments and attitudes, expressed thoughts and language, as well as nonverbal behaviors (Fazio, Sanbonmatsu, Powell, & Kardes, 1986). Once the first attachment representation is formed, it serves as the basis from which specific representations of subsequent relationships develop, for instance, relationships with friends and romantic partners in adulthood. Thus, not only do these mental models contribute to individuals' consistency and stability of relationship experiences with different relationship partners but also promotes stability of experiences throughout the lifespan. The most compelling support for this comes from a longitudinal study of women spanning 31 years (assessed at ages 21, 27, 43, and 52). This study found that, compared to secure women, those with an avoidant-attachment style showed a consistent cognitive-affective and behavioral style characterized by interpersonal distance, defensiveness, distrustful reliance, and vulnerability, and experienced trajectories of increasingly unhappy and unstable relationships (Klohnen & Bera, 1998).

Individual differences in such self- and other representations are two dimensions that underlie the four attachment styles—dismissing,

preoccupied, fearful, and secure (Bartholomew & Horowitz, 1991)—and have been shown to have far-reaching implications for quality of life, mental health, and relationship satisfaction (Kobak & Hazan, 1987; Cozzarelli, Sumer, & Major, 1998; Collins & Read, 1994; Feeney & Noller, 1990; Griffin & Bartholomew, 1994; Brennan & Shaver, 1995; Murray & Holmes, 1999; Collins, 1996). For example, it is assumed that people who have had negative, rejecting early experiences develop mental models of others that lead to discomfort with intimacy, anxiety about abandonment, and beliefs that others are untrustworthy and undependable (Hazan & Shaver, 1987). Early experiences with either a rejecting or inconsistent caregiver are also assumed to impact representations of self that develop, such as whether an individual believes he or she is worthy of love (e.g., Bowlby, 1969; Baldwin, 1992; Bersheid, 1994).

One way that mental representations may exert their influence on individuals' lives is by leading people to engage in schema-driven processes in interpreting and reacting to a variety of interpersonal behaviors. Consistent with this idea, Andersen and colleagues (Andersen, Glassman, Chen, & Cole, 1995) found that even in the absence of priming, people go beyond the information given about a new person by inferentially filling in the blanks about him or her when the new person resembles a significant other. That is, people use existing mental models of significant others to process subsequent information about a new person.

Understanding intraindividual dynamics of relational schemas: Network relationships and trigger features. The research reviewed so far shows that there are stable individual differences in one's relational schemas, and that these differences are meaningfully related to a host of behaviors and outcomes. Understanding how relational schemas impact behaviors and influence outcomes, however, also requires examining the intraindividual cognitive and affective processes that underlie relational schemas. What are some of the more specific associations among interpersonally relevant cognitions and affects, as well as the types of situations that activate them?

Recent research (Zayas & Shoda, 2002a) suggests that key aspects of mental representations are automatic evaluative associations toward significant persons—the extent to which a significant person automatically activates positive thoughts and elicits positive affective reactions. Using the Implicit Association Test (Greenwald, McGhee,

& Schwartz, 1998), Zayas and Shoda (2002a) found that people with a secure or preoccupied attachment style (i.e., hypothesized to hold a positive view of others) had stronger automatic positive reactions toward their current romantic partner, and stronger automatic supportive evaluations toward their mothers, compared to individuals with a dismissing or fearful attachment style (i.e., hypothesized to hold a negative view of others). Furthermore, automatic evaluative reactions toward a current romantic partner were related to concurrent automatic evaluative reactions toward one's mother, providing some support for the long-standing assumption that feelings and thoughts that develop through repeated interactions with a primary caregiver early in life shape the feelings and thoughts that develop in subsequent relationships with adult romantic partners (e.g., Bowlby, 1969; Hazan & Shaver, 1987).

While some cognitions and affects require no or little external stimuli for activation, other attachment relevant cognitions and affects become activated only under specific circumstances (e.g., threat or loss of the relationship, separation from the significant person). Research by Baldwin and colleagues (1993) for example, examines attachment style differences in interpersonal expectancies that take the form of *if . . . then . . .* contingencies and how these *if . . . then . . .* contingencies, which are conceptualized as cognitions and affects involving the self and others linked with one another through an associative network, become activated within a particular interpersonal context. Baldwin's research (1993) suggests that, for individuals with an avoidant attachment style (i.e., those who have negative views of others), relational statements (e.g., "*If* I trust my partner *then* my partner will . . . "), prime thoughts of negative outcomes (e.g., hurt), but nonrelational statements (e.g., "*If* I wash the dishes *then* my partner will . . . ") do not. For individuals with a secure attachment style, in contrast, relational thoughts activate thoughts about positive relationship outcomes. Not only is this pattern of results consistent with theoretical expectations, more generally, this research suggests that interpersonal expectancies consist of cognitive-affective reactions involving self and other and that these cognitive-affective dynamics are not always active, but become activated only within particular contexts, namely those that involve interpersonal (vs. nonrelational) situations.

The situational features that trigger relational schemas have been extensively studied in the relationships of violent men, who disproportionately hold insecure attachment styles (Dutton, Saunders,

Starzomski, & Bartholomew, 1994; Holtzworth-Munroe, Stuart, & Hutchinson, 1996). This research shows that violent men attribute more negative intent, selfish motivation, and blame to a wife than nonviolent husbands, specifically in situations that involve jealousy and rejection (e.g., a wife not interested in sex when the husband is), and show more anger to videotaped male-female conflicts when the scenario involves an anticipated loss of the relationship (e.g., partner wants to spend more time with friends; Dutton & Browning, 1988). However, a violent husband's reactions do not differ from a nonviolent husband's in situations that do not directly involve rejection, (e.g., a wife wants to talk about an uncomfortable issue, a wife wants the husband to complete a household job) (Holtzworth-Munroe & Hutchinson, 1993). Thus, rejection cues seem to have a distinctive link to cognitive-affective and behavioral anger responses for violence-prone men.

Another illustration of the CAPS framework to personality and close relationships, and more specifically, how situational features trigger a particular cognitive-affective dynamic, is Downey's and her colleagues' model of individual differences in rejection sensitivity (RS; Downey & Feldman, 1996). People who are high in RS enter into relationships, anxiously expecting rejection. Their fears and expectations are elicited specifically by rejection cues, or situations that allow for interpersonal rejection. For example, high RS people show an exaggerated startle response, which indexes the activation of the defensive motivational system and indicates the person is under heightened negative arousal, when looking at pictures depicting scenes of rejection but not when looking at pictures depicting negative but noninterpersonal scenes (Downey, Magios, London, Ayduk, & Shoda, 2002).

Research on RS also outlines how intraindividual cognitive and affective processes associated with this personality type lead to certain negative outcomes. This research has shown, for example, that because high RS people expect rejection, they also more readily encode relevant cues in the environment as actual rejection (Downey & Feldman, 1996). Perceived rejection confirms their worst fears and automatically triggers negative cognitive-affective reactions (Ayduk, Downey, Testa, Yen, & Shoda, 1999). To illustrate specifically, there seems to be a stronger automatic mental association between thoughts of rejection (primed in a priming-pronounciation task) and thoughts of anger and hostility in women high in RS (Ayduk et al., 1999; Study 1). These automatic reactions, in turn, emerge in defensive

responses, including aggressive behavior (Ayduk et al., 1999; Downey, Feldman, & Ayduk, 2000; Downey, Freitas, Khouri, Michaelis, 1998) as well as depressive symptomatology (Ayduk, Downey & Kim, 2001).

Overall, the theoretical and empirical work on attachment styles, interpersonal expectancies, and rejection sensitivity illustrates the utility of conceptualizing individuals in terms of the patterns of automatic associations among cognitions about self and others and their relationships, as well as the affective responses they activate. The findings are consistent with the CAPS framework in which a particular pattern of interconnected expectations, encodings, and affects within a person's CAPS network becomes activated by specific features of the interpersonal situation and gives rise to a particular *if . . . then . . .* profile of personality.

Activation of different relational schemas across different relationships. The research we have discussed so far has focused on the similarity in individuals' experiences within relationships, regardless of the particular relationship. For example, individuals with a fearful attachment style are believed to have a particular cognitive-affective dynamic (e.g., *if* he trusts his partner, *then* his partner will reject him). This cognitive-affective dynamic is assumed to become activated across many different relationships, promoting consistency and stability of experiences even when interacting with different individuals. However, is this always the case? Do individuals always experience relationships similarly, regardless of whom the relationship is with?

Research examining the variability of experiences of a single person across different relationships has found that although individuals may have a preferred style of relating to others within their close relationships, they do not simply have one single style. Rather, individuals have vastly different experiences, depending on the relationship. To account for this variability, it has been suggested that individuals have available to them various mental models of relationships, acquired either directly via their own interpersonal experiences, or indirectly by observation (Baldwin et al., 1996). Each mental model can be thought of as a subset of interconnected cognitions and affects within a person's CAPS network that leads to a particular behavioral response. Therefore, although multiple models may exist and be available within an individual's network, it is

assumed that only the mental model, activated at a given time, will influence accessible thoughts and feelings, as well as individual's subjective experience and behaviors.

Consistent with the assumption that individuals have various mental models, research by Andersen and colleagues (1996) has found that the consequence of mental models on the processing of information depends on which mental model is activated at a particular time. For example, meeting a new person who resembles a positive significant other activates the mental representation of the significant person, which, in turn, leads to automatic positive affective reactions toward the new person. In contrast, if the new person resembles a negative significant other, then activating the mental representation of the significant person leads to negative affective reactions toward the new person. Similarly, Baldwin and colleagues (e.g., Baldwin & Sinclair, 1996; Baldwin, Carrell, & Lopez, 1993) have shown that visualizing accepting significant others makes thoughts related to acceptance (versus rejection) more accessible after being primed with a success cue. In contrast, visualizing a significant other who was contingently accepting makes thoughts related to rejection (versus acceptance) more accessible after being primed with a failure cue.

Yet another consequence of such mental models is their effect on the self. Because mental models of relationships involve thoughts and affects associated with the self as well as significant others, recent research has begun examining the malleability of the self-concept as a function of interpersonal relationships. Andersen and colleagues, for instance, have proposed a theory of the entangled self that is highly consistent with the CAPS model we propose. First, within the entangled-self framework, the self-construct is conceptualized as a network of cognitions and affects. Although any subset can become activated at a given time, the self-relevant cognitions and affects that actually become activated depend on the contextual cues provided by the significant other (e.g., Hinkley & Andersen, 1996; Andersen, Reznik, & Chen, 1997; Andersen & Glassman, 1996). Similar to the CAPS model, an idiosyncratic but stable variability of cognitions, affects, and behaviors across different situations are central to the theory of the entangled self. The significant-other representations that are activated in any given moment influence the encoding and construal of situations and lead to a particular set of affective, motivational, and behavioral responses. Another example is provided by Baldwin and colleagues' studies finding that experiencing

disapproval from significant others (e.g., the pope for self-identified Catholics) results in more critical self-evaluations, whereas no such effect is found when individuals experience disapproval from a nonsignificant other (Baldwin, Carrell, & Lopez, 1993).

Thus, significant-other representations and associated self-with-significant-other knowledge structures mediate the relationship between *situation . . . behavior . . .* (i.e., *if . . . then . . .*) relationships. On a final note, this research takes the idea that cognitions and affects are activated as a function of the situation one step further: The situation is no longer simply whether it involves an interpersonal situation versus a nonintimate situation. Rather, now, each relationship partner is seen as its own unique situation, and the effects of activating the cognitions and affects associated with the attachment system should be expressed differently as a function of the specific relationship. Moreover, this approach highlights how the behaviors of one individual are generated by factors within the person working in combination with factors present in the situation (i.e., behaviors provided by the partner). Thus, the idea that behaviors emerge from the person and the situation are supported.

Interindividual Processes: Cognitive-Affective Dynamics Influence the Situations Encountered: $E_1 = f(P_2, B_1)$

How do individuals influence the situations they encounter in their everyday lives? What types of behaviors have been shown to influence subsequent situations encountered? Buss (1987) described three mechanisms (selection, evocation, and manipulation) by which individuals influence the social situations they encounter. Moreover, researchers have examined situation-person linkages, finding support for the hypothesis that the situations individuals create for themselves may reflect their personal tendencies, and their personal tendencies may be reinforced or sustained by the situations they create (e.g., Emmons, Diener, & Larsen, 1986; Snyder & Ickes, 1985; Caspi & Herbener, 1990).

Generating individual differences in situations encountered: Selection, evocation, and manipulation. First, individuals can exert a great deal of control by *selecting* to be in some situations over others. Romantic partner selection is one way that people encounter different physical and psychological situations (Buss, 1989, 1992; Ellis, 1992; Snyder &

Ickes, 1985), and therefore, can have powerful consequences on individuals' lives. By choosing to interact with some people over others—whether it is selecting friends or romantic partners—individuals open the door to one set of experiences, while at the same time closing the door on others. When individuals select their friends and mates, they simultaneously select the behaviors that they will be exposed to over a relatively long period of time (Buss, 1984). Consequently, who one decides to interact with is also likely to impact a person's subjective experiences. For example, research on adult attachment styles has found that individuals with an anxious ambivalent attachment style are less adept at caregiving behaviors (Collins & Feeney, 2000; Feeney & Collins, 2001). Because Collins and Feeney also found that effective caregiving leads to improved mood on the part of the individual seeking support, a person seeking support from an individual with an anxious ambivalent attachment style might experience less elevated mood as a consequence.

Moreover, the impact that selection of partners and friends has on one's life is not limited to an individual's immediate subjective experiences within the particular relationship, but may impact other concurrent and subsequent relationships. It is hypothesized that individuals form mental models of each relationship (e.g., Bowlby, 1969; Baldwin et al. 1996). These mental models are expected not only to guide behaviors within the respective relationship, but they may also become activated and used for processing of information in subsequent relationships (e.g., Andersen et al., 1995). Thus, the interactions that individuals experience as a result of selecting a mate or friend are likely to carry over and affect experiences in other concurrent and subsequent relationships, as outlined by attachment theory and demonstrated empirically by research that we reviewed previously (e.g., Klohnen & Bera, 1998).

Various factors have been shown to influence selection of dating partners. On the one hand, research has found that people prefer to affiliate with those who are similar to themselves (e.g., Holland, 1966; Kandel, 1978; Kohn & Schooler, 1983) and choose marriage partners who are similar to them in a variety of domains, such as physical appearance, intellectual abilities, and personal characteristics (Epstein & Guttman, 1984; Jensen, 1978; Vandenberg, 1972). On the other hand, studies have found that complementarity between members of a couple, not similarity, plays a role in how much satisfaction members experience in their interactions (Dryer & Horowitz, 1997).

Is there any evidence that one's past relationship experiences influence the dating partners people select? A recent study by Zayas and Shoda (2002b) utilized a mock Internet dating service to explore the relationship between past relationship experiences and preferences in dating partners. Among females, self-reports of receiving psychological abuse were positively related to selection of personal ads, which had been rated by a separate sample of women, as describing potentially abusive males. Among males, self-reports of inflicting psychological abuse were related to selection of personal ads describing a female with an adult attachment style with a negative view of self—associated in past research (O'Hearn & Davis, 1997; Henderson, Bartholomew, & Dutton, 1997) with abusive relationships.

Research by Swann and colleagues (1992) suggests that one reason that accounts for whom people select for dating partners involves self-verification processes: People tend to seek out self-confirming relationships. Consistent with self-verification theory, one study (Swann, Stein-Seroussi, & Giesler, 1992) found that individuals with positive self-concepts preferred to interact with an evaluator who described them favorably, whereas individuals with a negative self-concept preferred to interact with an evaluator who described them unfavorably. Moreover, analysis of the verbalized thoughts participants made during the decision-making process revealed that individuals who chose self-verifying partners were more likely to do so based on epistemic and pragmatic reasons.

According to Buss (1987), a second mechanism by which individuals' shape and control their environment is through *evocation*. Individuals can unintentionally evoke or elicit responses from their present situation. Individuals evoke actions and strategies consistently and predictably in others as a result of their enduring physical (e.g., appearance, racial and gender identity, occupational role) and psychological features. For example, competitive individuals tend to elicit competitive behaviors in other people (even when interacting with cooperative individuals) (Kelley & Stahelski, 1970). This interaction pattern occurs without the awareness of the competitor.

Evocation processes may also play a role in selection of dating partners. In a recent study, Zayas and Shoda (2002a, 2002b) found that sometimes individuals do not seek situations in as much as situations (i.e., other people) seek them. That is, females with a fearful or preoccupied attachment style—attachment styles associated with receipt of abuse in previous literature (e.g., Henderson, Bartholomew,

& Dutton, 1997; O'Hearn & Davis, 1997)—were preferred more often (compared to females with a secure or dismissing attachment style) by males who self-reported engaging in psychologically abusive behaviors. Thus, these women were not selecting abusive males, but their personal characteristic (i.e., their attachment style reflecting low self-esteem) attracted and elicited the attention of males with a prior history of psychological abuse.

The third mechanism for influencing situations described by Buss (1987) is *manipulation*. Manipulation refers to intentionally modifying, changing, and influencing others who are in the present environment. For example, an individual who is characterized as "social" might be the one to suggest moving a seminar to the local tavern (Snyder, 1987). Buss and colleagues (Buss, Gomes, Higgins, & Lauterbach, 1987) conducted a series of studies to examine the types of manipulation strategies that people use, as well as how the various strategies relate to situational demands and personal characteristics. Not only were six tactics of manipulation identified (i.e., charm, silent treatment, coercion, reason, regression, debasement), they also found stable individual differences in strategies employed, and more importantly, that individual differences in manipulation strategy were related to individual differences in personal characteristics. For example, individuals who scored high on neuroticism also tended to use regression tactics (e.g., pouting) and silent treatments as ways to manipulate and control the behaviors of others.

In a separate study, also examining how individuals shape the behaviors of others either through evocation or manipulation, Collins and Feeney (2000) found that individuals with an avoidant attachment style (i.e., hypothesized to hold a view of others as unsupportive) engaged in less effective support-seeking behaviors, which resulted in less helpful forms of caregiving from partners. The findings from Collins and Feeney's study highlight the dynamic interactions between the person and the situation. That is, individuals with an avoidant attachment style shape their environment in such a way as to magnify, or make accessible, the thoughts and feelings associated with a view that other people are unsupportive and rejecting. Research by Swann and colleagues also suggests that individuals manipulate their social world so that it confirms to their views of self. In one study of married couples, individuals with a positive view of self were more committed to relationship partners that confirmed their view of self. Likewise, individuals with a negative view of self were more committed to

spouses who evaluated them negatively and were more likely to withdraw from spouses who evaluated them positively (Swann, Hixon, Gregory, & de la Ronde, 1992).

Person-situation linkages. Although we have reviewed three ways that individuals are able to influence the situations they encounter as if the processes occur one at a time, research suggests that multiple processes are, in all likelihood, operating simultaneously in order to generate individual differences in the situations encountered. For example, individuals may be manipulating their environments as well as eliciting certain reactions from others. Moreover, the situations that individuals select, evoke, and/or create are assumed to be those that set in motion processes of social interchange that reinforce and sustain personal characteristics and initial tendencies (e.g., Emmons, Diener, & Larsen, 1986; Snyder & Ickes, 1985; Buss, 1984). It is not, therefore, surprising that research has found evidence for strong person-situation linkages.

Perhaps most relevant to research on stable individual differences in situations encountered, as well as highlighting the multiple processes operating simultaneously, is the work of Bolger and his colleagues (Bolger & Schilling, 1991; Bolger & Zuckerman, 1995). They hypothesized that neuroticism—assessed as a global personality dimension—may affect and reflect individuals' affective lives through two potential mechanisms: leading them to encounter stressful events more frequently (exposure hypothesis) or increasing their reactivity to stressful events (reactivity hypothesis). Using daily diary studies of couples, Bolger and Schilling (1991) found that people who score high in neuroticism were different from those who score low both in exposure and reactivity.

Recent work by Gable, Reis, and Elliot (2000) examined individual differences in situations encountered as well. Through a series of daily diary studies, Gable and colleagues were interested in teasing apart exposure versus reactivity hypotheses: Specifically, do people high in the appetitive-approach system (Behavioral Activation System, or BAS), which is sensitive to rewards, encounter more positive events (i.e., rewards) in their life, leading them to experience higher overall levels of positive affect, or do they just feel more positive affect in response to the same number of positive events? Conversely, do people high in aversive-avoidance system (Behavioral Inhibition System, or BIS), which is sensitive to punishments, encounter a greater frequency of negative life events (i.e., punishment), elevating their overall level

of negative affect, or do they just experience stronger negative affective reactions in response to the same number of negative events? Results supported the exposure hypothesis: People with high BAS reported greater exposure to positive events, a significant percentage of which were social and interpersonal in nature (e.g., going out with friends). In contrast, people high in BIS encountered a higher frequency of negative events. Results also partially supported the reactivity hypothesis: People high in BIS also experienced greater levels of negative affect in response to negative events.

The picture thus far is one where individuals influence their environment in a number of ways (e.g., through selection, evocation, and manipulation) and where these individual differences in situations encountered amplify personal tendencies, as reflected by a person's most chronically available thoughts, feelings, goals, and values. The personality system that develops between the individual and reliable features in his or her environment may be one where the situations encountered allow for the activation of the subset of affects and thoughts that the individual most commonly experiences and which will lead to expression of habitual, familiar, and well-practiced behaviors. Indeed, there is an abundance of research providing evidence consistent with this assumption. Tidwell, Reis, and Shaver (1996), for example, through the use of a diary methodology, found that individuals with an avoidant-attachment style reported fewer instances of participating in social activities in their day-to-day lives, suggesting that they may arrange social activities to decrease interpersonal closeness. In addition, compared to secure and preoccupied individuals, avoidant individuals systematically focused on opposite-sex, nonromantic interactions, suggesting selective avoidance of intimacy.

That individuals shape their social world in a way that reflects and reinforces their underlying cognitive-affective processes is also exemplified by research on self-fulfilling prophecy in the rejection sensitivity dynamic. Both experimental and daily diary studies indicate that during conflicts, high RS men become jealous and controlling and high RS women behave in more unsupportive and hostile ways towards their partners (Downey & Feldman, 1996; Downey, Freitas, Michealis, & Khouri, 1998). As a consequence, partners show greater anger, resentment and relationship dissatisfaction, which, in turn, leads to actual rejection and relationship break-ups in the long term for people high in RS (Downey et al., 1998). In summary, then, we see a vicious cycle where HRS individuals' expectations of rejection

become activated during conflict and lead to negative behaviors, which ironically reinforce and confirm their initial fears and perpetuate expectations of rejection.

The overall pattern that emerges from this set of studies supports the notion that observable individual differences in behavior stem at least partly from stable individual differences in the social situations that people encounter. That is, individuals' personal characteristics, regardless of whether they are conceptualized as cognitive-affective processes or as global personality dimensions, may predispose them to create certain situations in their environment (by seeking them out, creating, or evoking them). Their environment, in turn, tends to magnify, reinforce, or sustain these personal characteristics.

Phase 2: The Dyadic System

Whether stated explicitly or implicitly, many theories have assumed that a person who consistently behaves toward others, over time and across a variety of situations, in a particular manner (e.g., aggressively) is not just expressing a global behavioral predisposition (e.g., a tendency to behave aggressively), but rather that the person's behavior reflects interpersonal dynamics. Thus, several researchers have suggested viewing the relationships between two individuals as an interpersonal system (e.g., Margolin, 1981; Raush, Barry, Hertel & Swain, 1974), where the behaviors of one partner were not considered in isolation, but examined in relation to one another. In turn, what emerges from the resulting interpersonal system are stable and consistent interaction patterns between the two individuals. Our personality-in-context approach builds upon these and other previous frameworks by suggesting that one way to understand the dynamics that generate dyad-specific characteristics is by assuming that a large part of one partner's environment is the behavior of the other partner. By conceptualizing a dyadic system as the "interlocking" of two minds, it is thus possible to take further our understanding of how the stability of the person emerges, as well as an understanding of why and how couples develop stable interaction patterns over time as suggested by a plethora of recent research.

Theorists and researchers have long acknowledged that much of the consistency and coherence of the individual exists within, and as a result of, interpersonal relationships (e.g., Caspi & Herbener, 1990; Gottman, 1998; Maccoby, 1990; Patterson 1982). That is, qualities

normally attributed solely to the individual (e.g., behavioral consistency, frequency of expressing a certain behavior) arise from intraindividual cognitive-affective dynamics as well as stable individual differences in situations encountered. Using Q-sort data obtained through longitudinal studies of couples (assessed in 1970 and 1981), Caspi and Herbener (1990) found that individuals, who married spouses with a similar personality organization, were more likely to show consistency in their own personality across adulthood. The authors, providing a relational approach to understanding individual continuity and change, suggested that personality stability is possible because individuals create environments (through selection of mates, friends, occupations, and hobbies) that are compatible with their personal characteristics. These environments, in turn, are those that set in motion processes of social interchange that reinforce and sustain personal characteristics and initial tendencies (e.g., Emmons, Diener, & Larsen, 1986; Snyder & Ickes, 1985; Buss, 1984).

Behavioral interactions. An implicit assumption among such approaches to interpersonal relationship functioning, as well as the personality-in-context approach, is that the relationship between two individuals is not simply a "common context." Facilitated by the development of sophisticated observational and statistical methods, recent research has begun to examine complex behavioral interactions and dynamics, focusing on the dyad as the unit of analysis rather than on the individuals of the dyad in isolation (see Gottman, 1998 for a review of the study of dyadic interactions; Karney, 2001; Karney, Bradbury, & Johnson, 1999; Gonzalez & Griffin, 1999; Gonzalez & Griffin, 1997; Griffin & Gonzalez, 1995; Karney & Bradbury, 1995; Ickes & Gonzalez, 1994).

Studies on behavioral interactions within a dyad acknowledge how one partner's behaviors are heavily influenced by sequential and temporal ordering of the other partner's behaviors and events. Indeed, people often describe their own behaviors within their relationship in terms of *if . . . then . . .* contingencies, describing interactions with statements such as "*If* my partner behaves X, *then* I behave Y." Research has found evidence that certain behavioral interactions (e.g., *if* one partner behaves X, *then* the other partner behaves Y) are related to relationship outcomes (e.g., relationship satisfaction, conflict). For example, demand/withdraw interactions in which one partner demands discussion of a relationship problem, while the other partner remains

relatively silent and withdraws to avoid the discussion is a behavioral sequence associated with unhappy marriages and a decline in relationship satisfaction over time (Christensen & Heavey, 1993; Christensen & Heavey, 1990; Levenson & Gottman, 1985).

Research examining the interaction patterns of couples over a short period of time are extremely consistent with the central assumption of our model, namely, that one partner's behavior is a significant part of the other partner's situation, and that after repeated encounters with the same type of behavior, stable interaction sequences between both members of the dyad develop. One study found that distressed couples showed negative reciprocity (i.e., one partner expresses negativity and the other partner responds in kind), whereas nondistressed couples did not (Margolin & Wampold, 1981). Similarly, seventeen interaction sequences have been found to distinguish distressed from nondistressed couples (Revenstorf, Vogel, Wegener, Halweg, & Schindler, 1980). For instance, Revenstorf and colleagues found that in distressed couples, one partner's positive statement was followed by no immediate response from the other partner, whereas in nondistressed couples, one partner's positive statement was followed by a positive statement by the other partner. Yet another interaction sequence identified was that in distressed couples, one partner's negative statement was followed by a negative response from the other partner, whereas in nondistressed couples, a negative statement was followed by no immediate response. In addition, Revenstorf and colleagues found that after a problem was expressed, it was followed by a negative response in distressed couples and a positive response in nondistressed couples. One conclusion that can be drawn from these basic findings is that greater reciprocated negative affect in interactions leads to negativity as an "absorbing state" for dissatisfied couples (e.g., Gottman, 1998). Moreover, the negative state is one that is difficult to terminate once it begins.

On a related note, although couples, much like individuals, are likely to encounter different situations in their everyday lives, one thing is certain, according to Gottman and his colleagues: both happy and unhappy couples have conflict and disagreement (p. 28, Gottman, 1994). The distinguishing feature of relationship functioning, however, is in how the couples deal with the situation. In unhappy couples, disagreement is more likely to lead to a series of destructive behaviors, referred to as "The Four Horsemen of the Apocalypse," which have also been linked to a predictable pattern in the deterioration and failure

of marriages. Whereas in happy couples, disagreements and conflict lead to talking openly about them, among unhappy couples, they do not, instead leading to attacking behaviors (i.e., complaining about a person's character rather than a behavior), contempt (i.e., intention to insult, deprecate, and psychologically abuse the partner), defensiveness (e.g., denying responsibility, counterattacks), and stonewalling behaviors (i.e., when a partner stops communicating and responding).

While most of this research has focused on behavioral interactions distinguishing happy from unhappy couples, some findings also suggest that the personal characteristics of the individual members of the dyad are associated with specific behavioral interaction patterns. In one study, among violent husbands, wife withdrawal was a significant predictor of violence for males with a preoccupied attachment style, whereas wife defensiveness was a significant predictor for males with a dismissing attachment style (Babcock, Jacobson, Gottman, & Yerington, 2000). It is noteworthy that these interaction patterns are consistent with attachment theory's assumption that, for preoccupied individuals, fear of abandonment is likely to activate the attachment behavioral system, and for dismissing individuals, issues regarding control are assumed to activate the attachment behavioral system.

In addition, research has found that qualities of relationships, such as satisfaction and conflict, emerge from the interaction of both members' unique cognitive-affective processes. For example, when members of a dyad hold goals that differ from one another, conflict may result (Christensen and Heavey, 1993; Surra & Longstreth, 1990; Lamke, Sollie, Durbin, & Fitzpatrick, 1994). Also, although compatibility of specific cognitions among partners may increase positive relationship functioning, a general sense of understanding and common interest, despite specific contents of cognitions, may also increase positive outcomes. For example, research has found that happy spouses were more likely to project their own thoughts onto their partners, resulting in more assumed similarity (e.g., Thomas, Fletcher, & Lange, 1997; Murray & Holmes, 1999).

Situations of interdependence and dyadic interactions. Interdependence theory (Kelley, 1979; Kelley & Thibaut, 1978) is primarily concerned with situations of interdependence—situations in which the behavior of each partner influences the outcomes (i.e., rewards, such as pleasure and gratification, as well as costs, such as physical or mental effort, pain, embarrassment, anxiety) of the other

partner (e.g., situations involving conflict of interests). Although not focusing on relationships per se, to the extent that situations of interdependence are at the core of close intimate relationships, interdependence theory is particularly relevant to the present approach.

First, interdependence theory assumes that the personal significance of one partner's behavior increases as the relationship develops over time. As a relationship progresses, the cost of leaving the relationship increases, resulting in a decrease in the outcomes associated with alternative relationships. Consequently, as the outcomes in one's current relationship exceed the outcomes in an alternative relationship by more and more, partners become more dependent on the relationship as unique source of experiences (Thibaut & Kelley, 1959; Kelley & Thibaut, 1978). This phenomenon is indeed consistent with one of the central assumption of the personality-in-context approach, namely, that within close, intimate relationships, one of the most salient and significant features of a person's situational input is the behavior of his or her partner.

A second assumption shared by the current approach is interdependence theory's suggestion that patterns of interdependence are shaped by each person's dispositions, strategies, and goals and, consequently, affect the functioning of the dyadic relationship. How do patterns of interdependence reflect the unique qualities of each person? Individuals at first are assumed to view situations of interdependence from a purely self-interested perspective. Their preferences, outcomes, and behavioral options are conceptualized in terms of a matrix, referred to as the *given* matrix. In situations of interdependence, the given matrix undergoes a transformation process in which other factors such as the partner's well-being and social desirability are taken into account. The resulting matrix, referred to as the *effective* matrix, represents each person's desire to maximize a partner's outcome, joint outcomes, and achieve equity (Kelley & Thibaut, 1978). It is the effective matrix that guides actual behaviors within situations of interdependence. Thus, similar to our approach, through the transformation process, interdependence theory assumes that the interaction (I) between two individuals of a dyad (person A and person B) as a function of both individuals' personal characteristics in relation to one another within a particular situation of interdependence (S). This may be represented as $SAB \rightarrow I$ (Holmes, 2000).

Illustrating the utility of applying principles of interdependence to understanding relationship functioning is research by Rusbult and

colleagues on accommodation situations. People face accommodation situations when a significant other in an interdependence relationship behaves in a negative, destructive way and the other partner responds by accommodating (i.e., inhibits the impulse to respond destructively) (e.g., Rusbult, Johnson, & Morrow, 1986; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Normally, when confronted with a negative behavior, people respond in kind. However, in situations of interdependence, individuals often inhibit responding destructively. Rusbult and colleagues suggest that, via transformation of the given matrix, which is based on purely self-interests, to the effective matrix, which is based on joint-interests, individuals take into account the perspective of their partners. Consequently, this leads individuals to accommodate, rather than retaliate, in close relationships. Indeed, research has shown that inhibition of automatic destructive response tendencies in accommodative dilemmas is contingent upon activating a "partner-perspective" (Arriaga & Rusbult, 1998). Moreover, taking into account one partner's thoughts and feelings not only inhibits responding destructively, but it promotes relationship-preserving processes, such as making more benign attributions, engaging in constructive problem-solving strategies, and experiencing greater feelings of commitment to the relationship (Arriaga & Rusbult, 1998).

In summary, the personality-in-context approach is highly consistent with other theories of personality, social processes, and relationship functioning, such as interpersonal expectancies and relational schemas, self-fulfilling prophecies, attachment theory, rejection sensitivity, and interdependence theory. It provides one framework from which to link research on behavioral interactions (*Phase 2*, discussed above) with findings from social cognition (discussed in *Phase 1*, *intraindividual processes*) to studies on social psychological processes (discussed in *Phase 1*, *interindividual processes*).

Personality Phenomena Emerging from the Interpersonal System

The challenge and ultimate goal of personality psychology is twofold: first, it aims to identify the underlying organization that can account for each person's uniqueness, that is, individual differences among people. Second, this system has to account for the stability and

coherence of a person's behaviors, on the one hand, and the vast range and variability of experiences—thoughts, feelings, and behaviors—that characterize a person's life, on the other.

Reflecting the complexity of the task, the personality construct has come to be associated with different observable aspects, and, not surprisingly, has led to different conceptualizations of personality. For example, one observable aspect most commonly associated with personality is individuals' overall level of observed behavior—just how often, how intensely, or to what degree, a person displays a particular behavior. Describing a person as "violent" suggests that the person behaves violently more often relative to other people. Yet, a second observable aspect that has been thought to reflect "personality" is the characteristic situations in which individuals are likely to be found. Individuals differ in the situations they select, in the ways they manipulate responses from their social world, and in the reactions that they unintentionally elicit in others. For example, extraverted individuals are assumed to prefer social situations, while introverts are assumed to prefer solitary activities. That situations are associated with personality is also illustrated in the effect a person has on others (i.e., the reactions they elicit) (e.g., Allport, 1937). For example, a "charming" person is thought to be a person who has the effect of pleasing and delighting others. Finally, more recently, researchers have suggested that *if . . . then . . .* contingencies also reflect "personality." For example, a "self-confident" person is someone who, *if* in a high-pressure or challenging situation, *then* rises to meet the challenge, while the person's behavior may be no different from others when not in a high pressure or high challenge situation. Indeed, studies have shown that a lay theory of personality involves inferring others' cognitive-affective processing (e.g., construals, goals) that can account for observable *if . . . then . . .* situation-behavior patterns (Shoda & Mischel, 1993). Moreover, making inferences about a person's cognitions and affects is likely to increase (relative to situation-free trait inferences) as the target person becomes more personally relevant (Idson & Mischel, 2000).

We refer to all of these observable aspects (e.g., overall level of behaviors, situations encountered, and *if . . . then . . .* contingencies) as *personality phenomena*. Although traditional approaches to personality assume that these phenomena emerge from processes that reside primarily within the person, we propose instead that they

arise from a dynamic system that incorporates systematic intraindividual differences, as well as stable situational differences. In other words, many aspects of personality are characteristics of an interpersonal system(s), not of an individual in isolation. For this reason, we have deliberately referred throughout the paper to a person's cognitive-affective processing system as his or her "mind" rather than his or her personality, highlighting the point that observable aspects of personality emerge from the continuous interactions between a person's unique characteristics (i.e., CAPS network), as well as the situations in which people tend to find themselves in.

Our personality-in-context framework suggests one reason why various approaches within the field of personality may, at first glance, appear incompatible. Although mean levels of behaviors, situations encountered, and *if . . . then . . .* contingencies are all personality phenomena, they reflect different aspects of the underlying system. One aspect refers to individual differences in the situations a person encounters, or the "*if*'s," while another refers to the behaviors, or the "*then*'s," and yet another aspect refers to the *if . . . then . . .* contingencies rather than the frequencies of the "*if*'s" and "*then*'s." To the extent that various approaches differ in their focus, it is not surprising that often they infer different conclusions about the organization accountable for individual differences in behavior.

On a final note, what does our model say about the "existence" of personality? The view of personality that we are proposing is akin to the light reflected by an object. In this analogy, qualities that uniquely characterize an individual are analogous to the surface characteristics of a physical object, the individual differences in situations encountered is the light, and the observable aspects of personality is the light that is reflected. Just as the light reflected by the object depends on the object's surface structure but also on the nature of the light that illuminates the object, so too, individual's behaviors that are typically attributed to his or her "personality" depend on that individual's unique cognitive-affective processing structure and the situations he or she routinely encounters in everyday life. Unlike the color analogy, however, individuals' behaviors, in turn, influence the situations likely to be encountered in the future, making it difficult to locate "personality" at any point in the continuous chain of interactions. Perhaps it would make sense to say that "personality" is

nowhere, and everywhere, as it is an emergent property of the entire system consisting of interaction partners.

Relativism of Personality Phenomenon and Implications for Personality Change Over Time

One important implication of our personality-in-context approach is that we cannot predict how often a person will behave in a particular manner, unless we know something about the types of situations the person is likely to encounter in everyday life and the frequency in which he or she will encounter them. In order to predict how often a person will behave in a particular manner, one needs to know something about her as a person (e.g., her *if . . . then . . .* situation-behavior contingencies, which are assumed to reflect her CAPS network), as well as the situations she is likely to encounter in everyday life (i.e., the nature and frequencies of *if*'s).

For example, it is possible that two people, person *A* and person *B*, who are identical in terms of their cognitive-affective dynamics, or *if . . . then . . .* contingencies, behave quite differently. To illustrate, suppose that both person *A* and *B* have a CAPS network associated with an "*if* rejection, *then* violence" situation-behavior contingency. Also, suppose that person *A* tends to select dating partners who tend to become cold and distant as a result of conflict, while person *B* tends to select dating partners who make extra efforts to reach out under such circumstances. As a result, person *A* is more likely to face interpersonal situations that can be perceived as rejecting and thus is more likely to behave in a violent manner compared to person *B*, who encounters fewer interpersonal situations that activate the cognitive-affective dynamics producing a violent reaction. Thus, by simply looking at one aspect of the system (i.e., only noting an individual's overall tendencies for engaging in violent behaviors, or only assessing *if . . . then . . .* contingencies), one may draw very different conclusions about the unique qualities of a person. It is only by knowing the frequencies of *if*'s (i.e., situations), along with the *if . . . then . . .* contingencies (i.e., CAPS network) can we predict the frequencies of *then*'s (i.e., behaviors).

Does the personality-in-context approach inform us about the processes that promote stability versus change in behaviors throughout a person's lifespan? The type of change we have been discussing so far, which involves moment-to-moment variability in thought,

feelings, and behaviors that produce stable *if . . . then . . .* relationships, is distinct from change that is enduring and that occurs over time. The latter is likely to involve change in the structure of an individual's CAPS system itself (e.g., new or altered patterns of associations among cognitions and affects), or an enduring change in the types of situations a person encounters (e.g., change in dating partner, divorce, birth of a child). Although long-term structural changes are beyond the scope of the present article, there are some clear implications from the approach we presented here.

As already discussed, one factor that may either promote continuity or promote change is the dating partners individuals select. Selection of dating partners may have the effect of exposing an individual to a series of future social situations, while at the same time making other situations less likely. To the extent that individuals select romantic partners that reinforce their own personal tendencies, continuity and behavioral consistency throughout the lifespan may be promoted (e.g., Caspi & Bem, 1990; Caspi & Herbener, 1990). Individuals are of course capable of changing. To the extent that individuals select romantic partners who provide situations that do not necessarily reinforce personal tendencies or generate destructive interpersonal dynamics, the social and interpersonal situations that the romantic partner provides may lead to long-term change. That is, at the individual and dyadic level, successful, long-term change may be facilitated when the interpersonal system of which an individual is a part is also altered, affecting the features of the physical and psychological situations that the person encounters. For example, a person may come to learn that relationships with certain dating partners lead to unsatisfactory outcomes (e.g., she feels worthless and depressed when her partner is controlling and jealous). Such a realization may lead to changes in the type of partners chosen. Instead of continuing to select dating partners with similar characteristics, she may make a conscious effort to date romantic partners with other qualities—qualities that will not activate feeling and thoughts of low self-worth.

CONCLUSION

It makes sense that personality psychologists focused on the role of P while controlling for E in the $B = f(P, E)$ equation. Yet, people do not live in a vacuum or in meticulously controlled situations of a

laboratory, or respond only to items on a standardized questionnaire. A genuine understanding of such individual differences would require understanding the interpersonal systems in which an individual is a part, just as understanding why a particular animal or plant species is thriving or endangered requires not only an understanding of the structure and life cycle of that species, but also an understanding of the eco*system* of which the species is a part. One feature of a species may help it thrive and reproduce effectively in one ecosystem, but the same feature may make survival and reproduction difficult when embedded in a different ecosystem. That is, the response of the species (e.g., reproduction) is a function of the entire ecosystem of which it is a part. Similarly, to the extent that one wishes to understand the behaviors of people in their lives outside the laboratory, individual differences in the situations encountered must be taken into account.

For clarity, the framework outlined in this article focused only on the interactions between partners in a dyad in order to model such an ecosystem. That, of course, is a simplification, ignoring the fact that most couples do not live in isolation. How, then, might the model be extended to take into account the role of larger contexts within which a dyad is embedded? In the present framework, we considered a significant portion of the observable aspects of E that a member of a dyad encounters to be the behavior of the other member. Thus, a large portion of E_1 is B_2, and similarly, a significant portion of E_2 is B_1. Using this as a basis, we modeled the process in which E_1 is generated within a dyadic relationship. That is, because $B_1 = f(P_1, E_1)$ and $B_1 \approx E_2$, as well as $E_1 \approx B_2$, it follows that $E_2 \approx f(P_1, E_1) \approx f(P_1, B_2)$.

But the real world is more complex than the model used throughout the paper. Because dyads are themselves embedded in a larger social context or an ecosystem, the environment of each person of a dyad does not consist solely of his or her partner's behaviors. It is, therefore, necessary to consider the other systems of which each person is a part and to examine how these systems also affect the specific and immediate E that an individual encounters. The general approach we used in modeling dyadic interactions may be extended to address the effect of larger contexts. Namely, similar to considering one's partner as a dynamic agent providing situations one encounters, situations in people's lives depend on how the social and cultural systems, of which they are a part, respond. Ultimately, the future situations to be encountered depend not only on one's behavior but also on how the person's environment responds to the behavior. Thus, in order to fully

account for real-life dyadic interactions, one needs to extend the dyadic analysis by including the social and cultural systems. In other words, in order to achieve a more comprehensive understanding of people's behaviors in their lives, one needs to consider not only

$$B = f(P, E)$$

but also

$$E = f(X, B)$$

where X represents not only the partner but also the social and cultural system in which the dyad is embedded.

In the present paper, we have suggested that a genuine understanding of such individual differences would require understanding the interpersonal systems in which an individual is a part. We have devoted most of the paper to discussing, exclusively, a specific type of interpersonal system—those that involve one close, intimate other, such as a romantic partner. Ultimately, however, to the extent that one wishes to understand the behaviors of people in their lives outside the laboratory, individual differences in all types of situations encountered must be taken into account (not just situations that involve one close other). And that demands that we understand the process that mediates the effect of B on E, that is, the $E = f(X, B)$ function.

The analysis of the equation, $E = f(X, B)$, has often been regarded as falling outside of the domain of psychology—assigned as the target of inquiry to the social sciences, such as sociology, economics, anthropology, and history. It has often been said that interdisciplinary boundaries must be crossed, but in reality, the weight of disciplinary traditions has made such boundary crossing extremely difficult. The current analysis of the dyadic system, in which $E_1 = f(P_2, B_1)$ may provide a first step in that direction and provide an additional impetus for blurring disciplinary boundaries.

REFERENCES

Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Holt, Rinehart and Winston.

Andersen, S. M., & Glassman, N. S. (1996). Responding to significant others when they are not there: Effects on interpersonal inference, motivation, and affect. In R. M. Sorrentino and E. T. Higgins (Eds), *Handbook of motivation and cognition, Vol. 3: The interpersonal context* (pp. 262–321). New York: The Guilford Press.

Andersen, S. M., Reznik, I., & Chen, S. (1997). The self in relation to others: Motivational and cognitive underpinnings. In J. G. Snodgrass & R. L. Thompson (Eds.), *The self across psychology: Self-recognition, self-awareness, and the self concept*. Annals of the New York Academy of Sciences, Vol. 818 (pp. 233–275). New York, NY: New York Academy of Sciences.

Andersen, S. M., Reznik, I., & Manzella, L. M. (1996). Eliciting facial affect, motivation, and expectancies in transference: Significant-other representations in social relations. *Journal of Personality and Social Psychology*, **71**, 1108–1129.

Andersen, S. M., Glassman, N. S., Chen, S., & Cole, S. W. (1995). Transference in social perception: The role of chronic accessibility in significant-other representations. *Journal of Personality and Social Psychology*, **69**, 41–57.

Arriaga, X. B., & Rusbult, C. E. (1998). Standing in my partner's shoes: Partner perspective taking and reactions to accommodative dilemmas. *Personality and Social Psychology Bulletin*, **24**, 927–948.

Athay, M., & Darley, J. M. (1981). Towards an interaction-centered theory of personality. In N. Cantor & J. F. Kihlstrom (Eds.), *Personality, cognition, and social interaction* (pp. 281–308). Hillsdale, NJ: Lawrenece Erlbaum Associates.

Ayduk, O., Downey, G., & Kim, M. (2001). Rejection sensitivity and depression in women. *Personality and Social Psychology Bulletin*, **27**, 868–877.

Ayduk, O., Downey, G., Testa, A., Yen, Y., & Shoda, Y. (1999). Does rejection elicit hostility in high rejection sensitive women? *Social Cognition*, **17**, 245–271.

Babcock, J. C., Jacobson, N. S., Gottman, J. M., & Yerington, T. (2000). Attachment, emotional regulation, and the function of marital violence: Differences between secure, preoccupied, and dismissing violent and nonviolent husbands. *Journal of Family Violence*, **15**, 391–409.

Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin*, **112**, 461–484.

Baldwin, M. W., & Meunier, J. (1999). The cued activation of attachment relational schemas. *Social Cognition*, **17**, 209–227.

Baldwin, M. W., & Sinclair, L. (1996). Self-esteem and "if . . . then" contingencies of interpersonal acceptance. *Journal of Personality and Social Psychology*, **71**, 1130–1141.

Baldwin, M. W., Carrell, S. E., & Lopez, D. F. (1993). Priming relationship schemas: My advisor and the Pope are watching me from the back of my mind. *Journal of Experimental Social Psychology*, **26**, 435–454.

Baldwin, M. W., Fehr, B., Keedian, E., Seidel, M., & Thomson, D. (1993). An exploration of the relational schemata underlying attachment styles: Self-report and lexical decision approaches. *Personality and Social Psychology Bulletin*, **19**, 746–754.

Baldwin, M. W., Keelan, J. P. R., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social-cognitive conceptualization of attachment working models: Availability and accessibility effects. *Journal of Personality and Social Psychology*, **71**, 94–109.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, **61**, 226–244.

Bersheid, E. (1994). Interpersonal relationships. *Annual Review of Psychology*, **45**, 79–129.

Bolger, N., & Schilling, E. A. (1991). Personality and the problems of everyday life: The role of neuroticism in exposure and reactivity to daily stressors. *Journal of Personality*, **59**, 355–386.

Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality and Social Psychology*, **69**, 890–902.

Bowlby, J. (1969). *Attachment and loss: Separation*. New York: Basic Books.

Brennan, K. A., & Shaver, P. R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin*, **21**, 267–283.

Bruner, J. S. (1957). On perceptual readiness. *Psychological Review*, **64**, 123–152.

Buss, D. M. (1984). Toward a psychology of person-environment correspondence: The role of spouse selection. *Journal of Personality and Social Psychology*, **47**, 361–377.

Buss, D. M. (1987). Selection, evocation, and manipulation. *Journal of Personality and Social Psychology*, **53**, 1214–1221.

Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, **12**, 1–49.

Buss, D. M. (1992). Mate preference mechanisms: Consequences for partner choice and intrasexual competition. In J. H. Barkow & L. Cosmides (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 249–266). New York: Oxford University Press.

Buss, D. M., Gomes, M., Higgins, D. S., & Lauterbach, K. (1987). Tactics of manipulation. *Journal of Personality and Social Psychology,* **52***,* 1219–1229.

Cantor, N., Mischel, W., & Schwartz, J. C. (1982). A prototype analysis of psychological situations. *Cognitive Psychology*, **14**, 45–77.

Caspi, A., & Bem, D. (1990). Personality continuity and change across the life course. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 549–575). New York: The Guilford.

Caspi, A., & Herbener, E. S. (1990). *Journal of Personality and Social Psychology*. **58**, 250–258.

Christensen, A., & Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. *Journal of Personality and Social Psychology*, **59**, 73–81.

Christensen, A., & Heavey, C. L. (1993). Gender differences in marital conflict: The demand/withdraw interaction pattern. In S. Oskamp, & M. Costanzo (Eds.), *Gender issues in contemporary society. Claremont Symposium on Applied Social Psychology*, Vol. 6 (pp. 113–141). Thousand Oaks, CA: Sage.

Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology*, **71**, 810–832.

Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, **78**, 1053–1073.

Collins, N. L., & Read, S. J. (1994). Cognitive representations of attachment: The structure and function of working models. *Advances in Personal Relationships*, **5**, 53–90.

Cooley, C. H. (1902). *Human nature and the social order*. New York: Charles Scribner's Sons.

Cozzarelli, C., Sumer, N., & Major, B. (1998). Mental models of attachment and coping with abortion. *Journal of Personality and Social Psychology*, **74**, 453–467.

Crowell, J. A., & Treboux, D. (1995). A review of adult attachment measures: Implications for theory and research. *Social Development*, **4**, 294–327.

Downey, G., & Feldman, S. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, **70**, 1327–1343.

Downey, G., Feldman, S., & Ayduk, O. (2000). Rejection sensitivity and male violence in romantic relationships. *Personal Relationships*, **7**, 45–61.

Downey, G., Freitas, A. L., Michealis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Do rejection sensitive women get rejected by romantic partners? *Journal of Personality and Social Psychology*, **75**, 545–560.

Downey, G., Magios, V., London, B., Ayduk, O., & Shoda, Y. (2002). Rejection Sensitivity and the Startle Response to Threat-Cues.

Dryer, D., & Horowitz, L. M. (1997). When do opposites attract? Interpersonal complementarity versus similarity. *Journal of Personality and Social Psychology*, **72**, 592–603.

Dutton, D. G., & Browning, J. J. (1988). Concern for power, fear of intimacy, and aversive stimuli for wife assault. In G. Hotaling, D. Finkelhor, J. T. Kirkpatrick, & M. A. Straus (Eds.), *Family abuse and its consequences: New directions in research* (pp. 130–175). Newbury Park, CA: Sage.

Dutton, D. G., Saunders, K., Starzomski, A., & Bartholomew, K. (1994). Intimacy anger and insecure attachment as precursors of abuse in intimate relationships. *Journal of Applied Social Psychology*, **24**, 145–156.

Ellis, B. J. (1992). The evolution of sexual attraction: Evaluative mechanisms in women. In J. H. Barkow & L. Cosmides (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 267–288). New York: Oxford University Press.

Emmons, R. A., Diener, E., & Larsen, R. J. (1986). Choice and avoidance of everyday situations and affect congruence: Two models of reciprocal interactionism. *Journal of Personality and Social Psychology*, **51**, 815–826.

Epstein, E., & Guttman, R. (1984). Mate selection in man: Evidence, theory, and outcome. *Social Biology*, **31**, 243–278.

Fazio, R. H., Sanbonmatsu, D. M., Powell, M. C., & Kardes, F. R. (1986). On the automatic activation of attitudes. *Journal of Personality and Social Psychology*, **50**, 229–238.

Feeney, B. C., & Collins, N. L. (2001). Predictors of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology*, **80**, 972–994.

Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, **58**, 281–291.

Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology*, **78**, 1135–1149.

Gergen, K. J. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, **26**, 309–320.

Gergen, K. J. (1990). Social understanding and the inscription of self. In J. W. Stigler, R. A. Shweder, & G. Herdt (Eds.), *Cultural Psychology: Essays on*

Comparative Human Development (pp. 569–607). Cambridge, UK: Cambridge University Press.

Gonzalez, R., & Griffin, D. (1997). On the statistics of interdependence: Treating dyadic data with respect. In Steve Duck (Ed.), *Handbook of personal relationships: Theory, research and interventions* (2nd ed., pp. 271–302). New York: John Wiley & Sons.

Gonzalez, R., & Griffin, D. (1999). The correlation analysis of dyad-level data in the distinguishable case. *Personal Relationships*, **6**, 449–469.

Gottman, J. M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Gottman, J. M. (1998). Psychology and the study of the marital processes. *Annual Review of Psychology*, **49**, 169–197.

Greenwald, A. G, Banaji, M. R., Rudman, L. A., Farnham, S. D., Nosek, B. A., & Rosier, M. (2000). Prologue to a unified theory of attitudes, stereotypes, and self-concept. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition and behavior* (pp. 308–330). New York: Cambridge University Press.

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology*, **74**, 1464–1480.

Griffin, D. W., & Bartholomew, K. (1994). Models of self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, **67**, 430–445.

Griffin, D., & Gonzalez, R. (1995). Correlational analysis of dyad-level data in the exchangeable case. *Psychological Bulletin*, **118**, 430–439.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, **52**, 511–524.

Henderson, A. J. Z., Bartholomew, K., & Dutton, D. G. (1997). He loves me; he loves me not: Attachment and separation resolution of abused women. *Journal of Family Violence*, **12**, 169–191.

Higgins, E. T., & King, G. (1981). Accessibility of social constructs: Information-processing consequences of individual and contextual variability. In N. Cantor & J. F. Kihlstrom (Eds.), *Personality, cognition, and social interaction* (pp. 69–121). Hillsdale, NJ: Erlbaum.

Hinkley, K., & Andersen, S. M. (1996). The working self-concept in transference: Significant-other activation and self change. *Journal of Personality and Social Psychology*, **71**, 1279–1295.

Holland, J. L. (1966). *The psychology of vocational choice*. Waltham, MA: Blaisdell.

Holmes, J. G. (2000). Social relationships: The nature and function of relational schemas. *European Journal of Social Psychology*, **30**, 447–495.

Holtzworth-Munroe, A., & Hutchinson, G. (1993). Attributing negative intent to wife behavior: The attributions of maritally violent versus nonviolent men. *Journal of Abnormal Psychology*, **102**, 206–211.

Holtzworth-Munroe, A., Stuart, G., & Hutchinson, G. (1996). *Violent versus nonviolent husbands: Differences in attachment patterns, dependency, and jealousy.* Unpublished manuscript.

Hoyle, R. H., Kernbis, M. H., Leary, M. R., & Baldwin, M. W. (1999). *Selfhood: Identity, esteem, regulation*. Boulder, CO: Westview Press.

Ickes, W., & Gonzalez, R. (1994). "Social" cognition and social cognition: From the subjective to the intersubjective. *Small Group Research*, **25**, 294–315.

Idson, L. C., & Mischel, W. (2000). The personality of familiar and significant people: The lay perceiver as a social-cognitive theorist. *Journal of Personality and Social Psychology*, **80**, 585–596.

Jacobson, N. S., Gottman, J. M., Waltz, J., Rushe, R., & Babcock, J. M. (1994). Affect, verbal content and psychophysiology in the arguments of couples with a violent husband. *Journal of Consulting and Clinical Psychology*, **62**, 982–988.

Jensen, A. R. (1978). Genetic and behavioral effects of non-random mating. In C. E. Noble, R. T. Osborne, & N. Weyle (Eds.), *Human variation: Biogenetics of age, race, and sex* (pp. 51–105). New York: Academic Press.

Kandel, D. B. (1978). Similarity in real-life adolescent friendship pairs. *Journal of Personality and Social Psychology*, **36**, 306–312.

Karney, B. R. (2001). Depressive symptoms and marital satisfaction in the early years of marriage: Narrowing the gap between theory and research. In Steven R. H. Beach (Ed.), *Marital and family processes in depression: A scientific foundation for clinical practice* (pp. 45–68). Washington, DC, US: American Psychological Association.

Karney, B. R., & Bradbury, T. N. (1995). Assessing longitudinal change in marriage: An introduction to the analysis of growth curves. *Journal of Marriage and the Family*, **57**, 1091–1108.

Karney, B. R., Bradbury, T. N., & Johnson, M. D. (1999). Deconstructing stability: The distinction between the course of a close relationship and its endpoint. In J. M. Adams & W. H. Jones (Eds.), *Handbook of interpersonal commitment and relationship stability. Perspectives on individual differences* (pp. 481–499). New York: Kluwer Academic/Plenum.

Kelley, H. H. (1979). *Personal relationships: Their structures and processes*. Hillsdale, N.J.: L. Erlbaum Associates.

Kelley, H. H., & Stahelski, A. J. (1970). Errors in perception of intentions in a mixed-motive game. *Journal of Experimental Social Psychology*, **6**, 379–400.

Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relationships*. New York: Wiley.

Klohnen, E. C., & Bera, S. (1998). Behavioral and experiential patterns of avoidantly and securely attached women across adulthood: A 31-year longitudinal perspective. *Journal of Personality & Social Psychology*, **74**, 211–223.

Kobak, R. R., & Hazan, C. (1987). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology*, **60**, 861–869.

Kohn, M., & Schooler, C. (1983). *Work and personality: An inquiry into social stratification*. Norwood, NJ: Ablex.

Lamke, L. K., Sollie, D. L., Durbin, R. G., & Fitzpatrick, J. A. (1994). Masculinity, femininity and relationship satisfaction: The mediating role of interpersonal competence. *Journal of Social and Personal Relationships*, **11**, 535–554.

Levenson, R. W., & Gottman, J. M. (1985). Physiological and affective predictors of change in relationship satisfaction. *Journal of Personality and Social Psychology*, **49**, 85–94.

Lewin, K. (1935). *A dynamic theory of personality.* New York: McGraw-Hill.

Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. D. Cartwright (Ed.). New York: Harper & Row.

Maccoby, E. E. (1990). Gender and relationships: a developmental account. *American Psychologist*, **45**, 513–520.

Margolin, G. (1981). A behavioral-systems approach to the treatment of marital jealousy. *Clinical Psychology Review*, **1**, 469–487.

Margolin, G., & Wampold, B. E. (1981). Sequential analysis of conflict and accord in distressed and nondistressed marital partners. *Journal of Consulting and Clinical Psychology*, **49**, 554–567.

Markus, H., & Cross, S. (1990). The interpersonal self. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 576–608). New York: Guilford Press.

Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.

Mead, G. H. (1938). *The philosophy of the act.* Chicago: University of Chicago.

Mischel, W., & Morf, C. (in press). The self as a psycho-social dynamic processing system: A meta-perspective on a century of the self in psychology. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity*. New York: Guilford.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, **102**, 246–268.

Murray, S. L. (1999). The quest for conviction: Motivated cognition in romantic relationships. *Psychological Inquiry*, **10**, 23–34.

Murray, S. L., & Holmes, J. G. (1999). The (mental) ties that bind: Cognitive structures that predict relationship resilience. *Journal of Personality and Social Psychology*, **77**, 1228–1244.

O'Hearn, R. E., & Davis, K. E. (1997). Women's experience of giving and receiving emotional abuse. *Journal of Interpersonal Violence*, **12**, 375–391.

Patterson, G. R. (1982). *Coercive family process.* Eugene, OR: Castalia.

Plomin, R. (1986). *Development, genetics, and psychology*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Raush, H. L., Barry, W. A., Hertel, R. K., & Swain, M. A. (1974). *Communication, conflict, and marriage*. San Francisco: Jossey-Bass.

Reis, H. T., Capobianco, A., & Tsai, Fen-Fang. (this issue). Finding the person in personal relationships. *Journal of Personality*.

Reis, H. T., Collins, W. A., & Berscheid, E. (2000). The relationship context of human behavior and development. *Psychological Bulletin*, **126**, 844–872.

Revenstorf, D., Vogel, B., Wegner, R., Hahlweg, K., & Schindler, L. (1980). Escalation phenomena in interaction sequences: An empirical comparison of distressed and nondistressed couples. *Behavior Analysis and Modification*, **2**, 97–116.

Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. New York: McGraw-Hill.

Rusbult, C. E., Johnson, D. J., & Morrow, G. D. (1986). Impact of couple patterns of problem solving on distress and nondistress in dating relationships. *Journal of Personality & Social Psychology*, **50**, 744–753.

Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology*, **60**, 53–78.

Sampson, E. E. (1977). Psychology and the American ideal. *Journal of Personality and Social Psychology*, **35**, 767–782.

Sampson, E. E. (1978). Scientific Paradigms and Social Values: Wanted—A Scientific Revolution. *Journal of Personality and Social Psychology*, **36**, 1332–1343.

Scarr, S. (1988). How genotypes and environments combine: Development and individual differences. In N. Bolger & A. Caspi (Eds.), *Persons in context: Developmental processes. Human development in cultural and historical contexts* (pp. 217–244). New York: Cambridge University Press.

Scarr, S., & McCartney, K. (1983). How people make their own environments: A theory of genotype → environment effects. *Child Development*, **54**, 424–435.

Shoda, Y. (1991). Conditional analyses of personality coherence and dispositions. *Dissertation Abstracts International*, **52**(4-B): 2342–2343.

Shoda, Y. (1999). A unified framework for the study of behavioral consistency: Bridging person × situation interaction and the consistency paradox. *European Journal of Personality*, **13**, 361–387.

Shoda, Y., & Mischel, W. (1993). Cognitive social approach to dispositional inferences: What if the perceiver is a cognitive social theorist? *Personality and Social Psychology Bulletin*, **19**, 574–585.

Shoda, Y., & Mischel, W. (1998). Personality as a stable cognitive-affective activation network: Characteristic patterns of behavior variation emerge from a stable personality structure. In S. J. Read & L. C. Miller (Eds.), *Connectionist models of social reasoning and social behavior* (pp. 175–208). NJ: Lawrence Erlbaum.

Shoda, Y., LeeTiernan, S., & Mischel, W. (2002). Personality as a dynamical system: Emergence of stability and constancy from intra- and inter-personal interactions. *Personality and Social Psychology Review*.

Shoda, Y., Mischel, W., & Wright, J. C. (1994). Intra-individual stability in the organization and patterning of behavior: Incorporating psychological situations into the idiographic analysis of personality. *Journal of Personality and Social Psychology*, **67**, 674–687.

Shweder, R. A. (1991). Thinking through cultures: Expeditions in cultural psychology.

Shweder, R. A., & Sullivan, M. A. (1993). Cultural psychology: Who needs it? *Annual Review of Psychology*, **44**, 497–523.

Snyder, M. (1987). *Public appearances/private realities*. San Francisco: Freeman.

Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (3rd ed., Vol. 2, pp. 883–947). New York: Random House.

Sullivan, E. (1984). A critical psychology: Interpretation of the personal world. New York: Plenum Press.

Surra, C. A., & Longstreth, M. (1990). Similarity of outcomes, interdependence, and conflict in dating relationships. *Journal of Personality and Social Psychology*, **59**, 501–516.

Swann, W. B., Jr., Hixon, J., Gregory, & de la Ronde, C. (1992). Embracing the bitter "truth": Negative self-concepts and marital commitment. *Psychological Science*, **3**, 118–121.

Swann, W. B., Jr., Stein-Seroussi, A., & Giesler, R. B. (1992). Why people self-verify. *Journal of Personality and Social Psychology*, **62**, 392–401.

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups.* New York, Wiley.

Thomas, G., Fletcher, G. J. O., & Lange, C. (1997). On-line empathic accuracy in marital interaction. *Journal of Personality and Social Psychology*, **72**, 839–850.

Tidwell, M. C. O., Reis, H. T., & Shaver, P. R. (1996). Attachment, attractiveness, and social interaction: A diary study. *Journal of Personality and Social Psychology*, **71**, 729–745.

Vandenberg, S. G. (1972). Assortative mating, or who marries whom? *Behavior Genetics*, **2**, 127–157.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Zayas, V., & Shoda, Y. (2002a, under revision). *Automatic evaluative reactions toward significant persons.*

Zayas, V., & Shoda, Y. (2002b, under review). *The role of preferences in dating partners in the genesis of psychologically abusive relationships.*