An Exploration of the Relational Schemata Underlying Attachment Styles: Self-Report and Lexical Decision Approaches

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It is proposed that the cognitive mechanisms underlying attachment styles are expectations about interaction with significant others. Two studies are described that assessed these relational schemata. The first study revealed that individuals of different attachment styles do have different expectations about likely patterns of interaction with a romantic partner in various interpersonal domains. The second study demonstrated the utility of the lexical decision task for examining interpersonal expectancies. When given a related context, secure subjects were quicker to identify words representing positive interpersonal outcomes, whereas insecure subjects were quicker to identify negative outcome words. Methodological and conceptual implications of a relational schema approach to attachment styles are discussed.

Why is it that some people seem to enjoy warm, trusting relationships with their significant others, whereas others feel they are constantly being hurt, rejected, or ignored? Numerous writers have assumed that individuals develop expectations about what is likely to happen in relationships and that these expectations influence their behavior and information processing in subsequent interactions. According to attachment theory (Bowlby, 1969, 1973, 1980), the "working models" people develop about their most important relationships shape their personality and interpersonal styles in predictable ways. Research in the developmental (Ainsworth, 1982; Ainsworth, Blehar, Waters, & Wall, 1978) and close relationships (e.g., Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987; Simpson, 1990) literatures has indicated that if a person expects others generally to be emotionally available and responsive and to interact in positive ways, he or she will feel *secure* in relationships. Alternatively, if the person sees others as uniformly cold, rejecting, or manipulative, he or she may become insecure and *avoidant*, maintaining an emotional distance from others presumably for defensive reasons. Finally, if the individual has had inconsistent experiences with significant others, he or she may become *anxious/ambivalent* in subsequent relationships, seeking intimacy but feeling unsure about the other person's willingness to be close.

In a recent review of a number of diverse literatures, including close relationships, object relations, and interpersonal approaches to personality, Baldwin (1992) observed that many researchers are beginning to take a social cognitive perspective on interpersonal expectations and are developing the notion of *relational schemata*.

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Relational schemata are assumed to include multiple aspects of social knowledge, which together represent understandings and expectations of interpersonal experience. Elements of a relational schema include a model of self (i.e., a self-schema; Markus, 1977) and a model of the other person (i.e., an impression or schema of the other), as each is experienced in this interpersonal context. Importantly, these schemata are seen as linked by an associated script for the likely course of interpersonal events, such as "When I demand something, my partner withdraws" (e.g., Christensen, 1987) or "I can rely on my partner to react in a positive way when I expose my weaknesses to him/her" (Rempel, Holmes, & Zanna, 1985, p. 102). Relational schemata presumably direct people's attention to specific kinds of interpersonal information, leading them to ignore or forget other, schema-irrelevant experiences. Other aspects of schematic processing apply as well: In the communications literature, Planalp (1987) has explored how relational schemata help perceivers make sense of ambiguous interaction sequences—for example, by placing actions in a clarifying context of expected interaction patterns between persons of different social status.

The advantage of adopting a social cognitive perspective is that it allows one to focus on the precise mechanisms by which interpersonal expectations influence information processing. Work in cognitive psychology, for example, has suggested that expectations about events are coded in the form of if-then contingencies (Anderson, 1983; Smith, 1984), such as "If I do X, then the other person will do Y." This type of knowledge has a number of characteristics that make it particularly germane to the study of close relationships. For example, through repeated experience, if-then contingencies may become proceduralized, whereby they can function automatically and without the perceiver's awareness to shape the interpretation of schema-relevant information (Kihlstrom, 1987; Smith, 1984). A person who expects, for instance, that "if I trust others, they will hurt me" might be more vigilant than the average person for signs of manipulation, may automatically interpret ambiguous behavior in a schema-congruent manner, and may show remarkable recall for past occasions when trust was violated.

The present studies were designed to examine the if-then contingencies that make up the interpersonal expectations underlying attachment styles. First, a number of domains were chosen in which individuals with different attachment styles are assumed to have different interpersonal expectations—specifically, the domains of dependency, trust, and closeness (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987). According to this literature, secure individuals are those who generally expect good outcomes in these domains. Expressed in the if-then format, secure individuals might expect that "if I *trust* my partner, then my partner will *care* more about me." In this same relational context, however, insecure individuals should be more likely to accept negative outcomes. An avoidant person who has learned that others are cold and manipulative might expect to be *hurt*, for example.

The first study followed a self-report format, in which subjects of different attachment styles were asked to consider a number of relational contexts and estimate the likelihood of their partner's responding in various ways in each context. In the second study, subjects performed a lexical decision task in which they read a sentence describing a relational context and then tried to identify as quickly as possible words describing various interpersonal outcomes. Predictions were that patterns of reaction times would reflect the relational expectations underlying the different attachment styles.

STUDY 1

The first study was conducted in two phases. In Phase 1, subjects generated possible if-then pairs in the three interpersonal domains. In Phase 2, a self-report approach was used to identify which of the positive and negative expectations generated in Phase 1 were most closely associated with each attachment style (i.e., secure, avoidant, or anxious/ambivalent).

Phase 1: Item Generation

It was first necessary to identify relational expectations held by individuals of different attachment styles. As previously mentioned, on the basis of the attachment literature, the domains of dependency, closeness, and trust were selected for study. Subjects ($N = 39$) were given sentence stems in each domain and were asked to generate possible positive and negative responses that a partner might make. For example, for the stem "If I *depend on* my partner, he/she might. . ." one subject provided the responses *support me, look to me for support too,* and *let me down.* The most common positive and negative responses in each domain that could be expressed in a single word (and therefore would also be suitable for the lexical decision task in Study 2) were selected. The context sentences and related targets are displayed in Table 1.

In addition, we asked subjects to generate exemplars for each context for use in the second phase of this study. For example, for the stem *I depend on my partner,* one subject responded with *I am in an emergency situation and I need my partner's help.*

Phase 2: Self-Report of Interpersonal Expectations

On the basis of the Phase 1 responses, a questionnaire was designed that simply asked people what their inter-

TABLE 1: Context Sentences and Outcome Words by Domain, Study 1

Domain	Context Sentence (If I [. . .] then my partner will)	Type of Outcome Word: Positive Outcome	Type of Outcome Word: Negative Outcome
Trust	Trust my partner	Care	Hurt
Dependency	Depend on my partner	Support	Leave
Closeness	Try to get closer to my partner	Accept	Reject

personal expectations were, a technique that has been used successfully by others (e.g., Christensen, 1987; Hill & Safran, 1993; Safran, Segal, Hill, & Whiffen, 1990). Two predictions were made for this study. First, an interaction between attachment style and valence of outcome was predicted, such that the two insecure groups (i.e., avoidant and anxious/ambivalent subjects) would report more negative expectations of their partners' behavior than the secure group. Second, it was hypothesized that negative expectations would be more pronounced in different domains for the two insecure styles: Anxious/ambivalent subjects were expected to be most pessimistic about their partners' response to expressions of dependency and desires for closeness, whereas avoidant subjects should be most pessimistic in the domain of trust (e.g., Collins & Read, 1990; Feeney & Noller, 1990).

Method. In the questionnaire, each context was represented by three exemplars, derived from the most representative examples provided by subjects in Phase 1. The context of *trying to get closer to one's partner,* for example, was represented by the exemplars *You want to spend more time with your partner; You reach out to hug or kiss your partner;* and *You tell your partner how deeply you feel for him/her.* After each statement, the subject was presented with the two outcomes (one positive, one negative) also derived from Phase 1 (e.g., *he/she accepts you* and *he/she rejects you*). For each context, subjects were simply to imagine being in the situation with a romantic partner and to rate each of the outcomes according to how often it would be their partner's response, on a scale ranging from 1 (*never*) to 7 (*always*). At the end of the questionnaire, they were asked their age, their gender, and whether they had filled out the questionnaire with reference to a current relationship partner or "partners in general."

This questionnaire was completed by 123 subjects (60 men, 63 women), who participated for course credit. Their average age was 20.9 years. After finishing the questionnaire, subjects responded to the Hazan and Shaver (1987) attachment style question, which asks them to choose which of three paragraphs best describes their feelings in close relationships. In this sample, 67 (54%) identified themselves as secure, 43 (35%) were avoidant, and 13 (11%) were anxious/ambivalent.

Results and discussion. The expectations data were analyzed in a 3 (Attachment Style) × 3 (Domain) × (Valence of Outcome: positive vs. negative) multivariat analysis of variance. The Style by Valence interaction wa marginally significant, $F(2, 120) = 2.93$, $p = .057$ (se Table 2 for means). As expected, the two-way interactio was moderated by a significant Style by Valence by Do main interaction, $F(4, 240) = 3.19$, $p < .05$.[1,2] Univariat analyses (using a pooled variance estimate) showec that the two-way Style by Valence interaction was sig nificant in the domains of trust, $F(2, 120) = 5.23$, $p < .01$, and closeness seeking, $F(2, 120) = 3.29$, $p < .05$, but no dependency, $F < 1$. To interpret the three-way interaction, the valence factor was expressed as difference scores between positive and negative outcomes, higher numbers representing more optimistic expectations. Inspection of these difference scores (see Table 2) shows that anxious/ ambivalent subjects were less optimistic in the domains of trust, $t(120) = 3.20$, $p < .01$, and closeness seeking, $t(120) = 2.27$, $p < .05$, than secure subjects (who were optimistic in all domains), and avoidants were marginally less optimistic than secures in the domain of trust, $t(120) = 1.74$, $p = .08$. Comparing the two insecure groups, anxious/ambivalent subjects were less optimistic than avoidants in the domains of both trust, $t(120) = 1.99$, $p < .05$, and closeness, $t(120) = 2.40$, $p < .05$.

The if-then relational patterns we identified captured differences between attachment styles in interpersonal expectations that are generally consistent with the literature, with insecure subjects more pessimistic than secure subjects. The findings were significant in the domains of trust and closeness, though not in the dependency domain. Other researchers have also been most successful in identifying interpersonal concerns in the domains of trust and closeness. Hazan and Shaver (1987, Study 1), for example, found that insecure subjects were uncomfortable with trust and closeness, as assessed by responses to such statements as "I feel complete trust in [my partner]" and "I sometimes feel that getting too close to [my partner] could mean trouble" (p. 514). In their second study (Hazan & Shaver, 1987, Study 2), they found that avoidant, but not anxious/ambivalent, subjects were less trusting than secures. Similarly, Collins and Read (1990) found that, on the Rotter Trust Scale (Rotter, 1967), both insecure groups were less trusting than secures on the Trustworthiness of Human Motives subscale; avoidant subjects scored significantly lower than the other two groups on the Integrity of Social Agents and Dependability of People subscales. Using continuous rather than discrete assessments of attachment style, Simpson (1990) reported that the tendency to be avoidant or anxious in relationships was negatively correlated with trust in one's romantic partner and

TABLE 2: Interpersonal Expectations by Context Domain, Outcome, and Attachment Style, Study 1

Context	*Outcome*	*Secure*	*Avoidant*	*Anxious*
Trust	Care	4.94	4.64	4.20
	Hurt	1.74	1.96	2.49
	d	3.20	2.68	1.71
Closeness	Accept	5.77	5.79	5.15
	Reject	1.90	1.80	2.41
	d	3.87	3.99	2.74
Dependency	Support	5.75	5.79	5.51
	Leave	1.80	1.82	2.00
	d	3.95	3.97	3.51

NOTE: Ratings were made on a 7-point scale. *d* represents the difference between expectations for the positive and negative outcomes in each domain; higher values of *d* indicate more optimistic expectations.

confidence in his or her dependability (as assessed by the Rempel et al., 1985, Trust Scale). Although dependency in close relationships is widely recognized as theoretically relevant to attachment, direct evidence for concerns about partner's response to dependency has largely been limited to the finding that anxious/ambivalent subjects desire a high level of dependency and commitment in relationships (Feeney & Noller, 1990) but report feeling anxious about whether their partners will reciprocate (Collins & Read, 1990).

The current results show that expressing interpersonal expectations in the if-then format is a useful approach for assessing relational schemata. One potential advantage of the if-then format for future research is that it enables the direct exploration of the contingencies of expectations, compared with other approaches that simply assess overall levels of trust and so on. For example, the domains could be refined further, assessing the degree to which insecure subjects expect to be hurt as a result of trusting their partners through self-disclosure, emotional expression, or physical intimacy.

The findings in this study were weaker for avoidant than for anxious/ambivalent subjects, when compared with secure subjects. This seems contradictory to the assumption that avoidant persons have even more negative interpersonal expectations, based on a history of rejection and hostility, than anxious/ambivalent subjects, whose significant others have merely been inconsistent or insensitive (Ainsworth et al., 1978). It is often suggested, however, that avoidants may deny their fears about attachment as a kind of defense mechanism (e.g., Bartholomew, 1990; Main, Kaplan, & Cassidy, 1985). If so, this raises the intriguing possibility that stronger results might be obtained when using tasks such as the lexical decision task that assess automatic processing and hence might be less open to certain types of defense and impression management than the standard questionnaire format.

STUDY 2

This study was conducted to assess the cognitive mechanisms underlying individual differences in the experience of relationships using methodology borrowed from cognitive psychology. A number of research methods have been adapted successfully from cognitive psychology and applied to social psychological domains in recent years—for example, prototype generation (Fehr, 1988; Fehr & Russell, 1991), the Stroop color-word test (Gotlib & McCann, 1984; Segal, Hood, Shaw, & Higgins, 1988), and various cognitive priming techniques (Baldwin, Carrell, & Lopez, 1990; Baldwin & Holmes, 1987; Bargh & Pietromonaco, 1982; Higgins, Rholes, & Jones, 1977).

One cognitive methodology that seems particularly well suited to the study of relational schemata is the *lexical decision* task (Meyer & Schvaneveldt, 1971; see Neeley, 1991, for a review). In this task, the subject reads a string of letters and tries to identify as quickly as possible whether it is a word or a nonword. Reaction times (RTs) for words are quicker if a context that is related to the target word has been provided. For example, subjects recognize *nurse* as a word more quickly if they have just read *doctor*, compared with an unrelated word such as *bread*. This phenomenon has been extended to sentence contexts as well, with subjects faster at recognizing *nail* as a word if they have just finished reading *The carpenter hammered in the . . .* (e.g., Forster, 1981; Schuberth & Eimas, 1977; Stanovich & West, 1983).

The lexical decision task has been applied in social cognition research by Gaertner and McLaughlin (1983), who studied the networks of declarative knowledge underlying stereotyping. Their subjects identified *ambitious* as a word more quickly if they had been primed with *Whites* than if they had been primed with *Blacks*. Our goal was to use this methodology to examine the knowledge that underlies social expectations. In the case of the popular restaurant script, for instance, might *Once I sat down, the waiter brought me the . . .* facilitate recognition of the target word *menu*? Or, more interestingly, would *When I demand something, my partner . . .* facilitate recognition of the word *withdraws*?

Thus the lexical decision task seemed promising for exploring the if-then structures that constitute individuals' cognitive maps of the social world and potentially offered a window into the mechanisms underlying individual differences in social perception. As mentioned earlier, in most studies, target words are presented in both closely related and totally unrelated contexts, with the typical finding that RTs are faster in the related contexts. However, some studies have shown that a facilitation in RTs for related contexts is evident only if the target is the expected completion of the

sentence, not if the target is a plausible completion but not the most expected one (Fischler & Bloom, 1979, 1985). In one study (Forster, 1981), the context *He thought he wasn't earning enough . . .* did produce a relatedness effect for the target *money* but not for the target *respect*—a word that is a sensible completion but is not the most predictable one. However, imagine that one of the subjects (e.g., Rodney Dangerfield) in the experiment just described had been quite satisfied with his income but was currently unhappy with the treatment he was receiving from friends and associates. Might this person not show a greater relatedness effect for the target *respect*, the normally less-predicted target? Given the reasoning behind the lexical decision task, one should expect a context-relatedness effect only to the extent that the target is *congruent* with the individual's own expectations and concerns.

This reasoning was applied to relational schemata in the second study. Subjects of different attachment styles performed a lexical decision task in which sentences established interpersonal contexts, and target words (from Study 1) represented either positive or negative outcomes. Predictions were that (a) placing the words in meaningful interpersonal contexts would lead to faster RTs overall, confirming the utility of the lexical decision task for studying social knowledge, and (b) this context-relatedness effect would be strongest when outcomes matched the specific interpersonal expectation assumed to underlie subjects' own attachment style. That is, it was expected that secure subjects would show the greatest context effect for positive words and insecure (avoidant and anxious/ambivalent) subjects would show a greater effect for negative words.

Method

Subjects. Forty-one subjects, fluent in English, volunteered from the introductory psychology subject pool and were given course credit for participation. Because the three styles are typically represented in unequal proportions in any given population, an attempt was made to recruit equal numbers of secure, avoidant, and anxious/ambivalent subjects on the basis of measures taken earlier in the academic year. Unfortunately, this procedure was unsuccessful, because the measure of attachment style proved quite unstable over the 5-month period between the pretest and its readministration in the experimental session (note that this problem was not peculiar to the present study; see Baldwin & Fehr, 1993, for a discussion of this issue). On the basis of the concurrent measure (see below), the sample now included only 5 anxious/ambivalent subjects, too few to support any meaningful analyses. In addition, preliminary inspection of the lexical decision data showed that 2 subjects had unusually high rates of errors and/or nonresponses (36.11% and 26.39% of trials). Excluding these subjects from all analyses left 17 secure subjects, based on the concurrent measure (8 female and 9 male), and 17 avoidant subjects (10 female and 7 male). Their average age was 21.0 years.

Apparatus. The lexical decision task was programmed using the Micro Experimental Laboratory (Schneider, 1990), a package that allows one to create customized software for psychological experiments. The task was run on Mind 386-SX computers, with Aamazing color monitors. All monitors were adjusted to the same level of brightness and contrast using a light meter. Levels were set somewhat low, and the lexical decision targets were displayed in light gray letters, as degrading the target has been shown to increase the lexical-decision relatedness effect (Stanovich & West, 1983). The prime sentences and all instructions were displayed in white lettering on a black background.

Stimuli. The primary stimuli of interest were the interpersonal context sentences and target words displayed in Table 1. To determine whether the interpersonal context affected reaction times by virtue of being related to the target, a second category of unrelated contexts and targets was required as well. Three unrelated contexts were selected from standard verb lists (Francis & Kuçera, 1982; Van Nieberg, 1965)—for example, "If I *wash the dishes* then my partner will . . . ." Associated with these unrelated contexts were noninterpersonal targets (*read*, *catch*, and *dry*) that served as controls for the time required to make a "word" response on the lexical decision task. Finally, nine nonwords were generated by taking common verbs (e.g., *think*, *follow*) and changing one letter (e.g., *shink*, *mollow*). These nonwords were matched for number of characters with the word targets.

For each of the three domains, then, there were two context sentences—one related to the interpersonal theme and one unrelated. These contexts were each combined with a positive outcome word and a negative outcome word, as well as one control (noninterpersonal) word and three nonwords. Each context-target pair was presented twice, for a total of 72 trials. The trials were randomly ordered for each subject.

Procedure. Subjects were run in groups of between 5 and 20, in a computer lab containing 30 terminals. Subjects worked at their own pace. They were first given practice trials for the lexical decision task, in which a letter string was displayed on the computer screen and they were asked to judge as quickly as possible whether it was a word or a nonword. They initiated each trial by pressing the space bar and responded by pressing the 1 on the keyboard number pad for *word* or the 2 for *nonword*. After nine practice trials, they were told that "to make this task a little more difficult," they would be asked

TABLE 3: Lexical Decision Reaction Times by Attachment Style, Context Relatedness, and Schema Congruency of Target Word, Study 2

	Schema-Congruent Targets			*Schema-Incongruent Targets*			
Context	*Secure*	*Avoidant*	*All Subjects*	*Secure*	*Avoidant*	*All Subjects*	*Overall*
Unrelated	638.16	654.73	646.44	643.75	629.50	636.63	641.53
Related	609.69	618.91	614.30	632.72	628.17	630.45	622.37
Relatedness Effect	28.47	35.82	32.14	11.03	1.33	6.18	19.16

NOTE: Reaction times are expressed in milliseconds.

to do a second task at the same time. This second task involved reading some sentences about interactions that might happen in a close relationship and trying to remember them for later. Using the rapid serial visual presentation technique (Forster, 1970), each context sentence was displayed one word at a time on the computer screen, at a rate of 600 ms per word. After a 1,000-ms pause, the sentence was followed by one of the lexical decision targets, presented for 1,500 ms, which subjects were to identify as either a word or a nonword. An example of one of the trials is *If I depend on my partner then my partner will*, followed by the lexical decision target *leave*. Nine practice trials with this two-part task were given.[5]

After completing all 72 trials of the lexical decision task (which took approximately 25 min), subjects responded to the Hazan and Shaver (1987) attachment style question. As previously mentioned, this measure identified 17 secure and 17 avoidant subjects.

Results and Discussion

Our first hypothesis was that there would be an overall relatedness effect, in which interpersonal targets would be recognized as words more quickly when set in a meaningful interpersonal context than when not. Reaction times for interpersonal targets[4] were analyzed in a 2 (Attachment Style) × 3 (Context Domain) × 2 (Context-Target Relatedness) × 2 (Schema Congruency of Target) repeated-measures analysis of covariance, covarying out baseline mean reaction times for nonwords and for noninterpersonal words.[5,6] The overall main effect for relatedness was only marginally significant but in the predicted direction, with average RTs of 622.37 ms when the context was related versus 641.53 ms when the context was unrelated, $F(1, 29) = 3.67$, $p = .065$ (see Table 3). Thus there was some evidence that lexical decision times for interpersonal words were influenced by sentence primes that placed the words in a meaningful context. This demonstrates the sensitivity of the lexical decision task to knowledge about interpersonal scripts, as represented in if-then contingencies.

We had more specific hypotheses about the conditions under which relatedness effects would be most evident, however. First, if the relatedness effect does result from interpersonal expectancies as represented in relational schemata, we should find the effect only for context-target pairs that are *congruent with* the individual's expectancies. That is, secure subjects should show the relatedness effect for positive outcomes, and avoidants should show the effect for negative outcomes. Planned contrasts[7] were used to examine schema-congruent and schema-incongruent targets separately. For targets that were selected to match the styles' expectancies, there was indeed a significant relatedness effect of 32.14 ms (see Table 3), $F(1, 30) = 4.40$, $p < .025$ (one-tailed). However, for interpersonal outcomes that were incongruent with the individual's relational schema, there was only a nonsignificant 6.18-ms difference between related and unrelated trials, $F < 1$. These findings support the prediction that lexical decision relatedness effects in this task reflect the individual's interpersonal expectations, as indicated by attachment style.

An additional set of internal analyses was suggested by the Study 1 finding that style effects were most evident in the domain of trust, especially for avoidant subjects. Parallel to those earlier findings, style differences in lexical decision relatedness effects were most pronounced in the trust domain (although the effects are not strong, owing in part to the obviously lowered reliability because of a relatively small number of trials in each domain): The relatedness effect for congruent words was the highest for trust (51.7 ms vs. –19.1 ms for incongruent words), with a less clear pattern of differences in the other domains (closeness, 22.1 vs. 14.9; dependency, 22.6 vs. 22.7). In addition, the Congruency by Relatedness interaction, which was not significant when assessed across all domains (see Note 7), was significant for trust when considered alone, $F(1, 31) = 3.09$, $p < .05$ (one-tailed) (see Table 4 for the means for trust items; for other domains, $Fs < 1$). These findings must be interpreted with caution in the absence of higher-order interactions, but they do suggest that the lexical decision task is sensitive to the same differences between domains that appeared in the Study 1 self-report data.

GENERAL DISCUSSION

The two studies provide converging evidence that a cognitive mechanism underlying attachment styles con-

TABLE 4: Lexical Decision Reaction Times in the Domain of Trust, by Attachment Style, Context Relatedness, and Schema Congruency of Target Word, Study 2

	Schema-Congruent Targets			*Schema-Incongruent Targets*		
Context	*Secure*	*Avoidant*	*All Subjects*	*Secure*	*Avoidant*	*All Subjects*
Unrelated	606.69	663.47	635.08	652.19	603.87	628.03
Related	581.09	585.66	583.37	688.72	605.56	647.14
Relatedness Effect	25.60	77.81	51.71	−36.53	−1.69	−19.11

NOTE: Reaction times are expressed in milliseconds.

sists of interpersonal expectations as expressed in if-then contingencies. On the self-report questionnaire, subjects of different attachment styles gave different estimates of the likelihood of various positive and negative outcomes in response to expressions of trust and closeness seeking. The lexical decision approach was also fruitful as a means of studying relational expectations: Words describing interpersonal behavior were recognized more quickly when placed in a meaningful relational context. Moreover, this effect was evident only when the interpersonal outcome matched the subject's own expectations, as indicated by his or her attachment style. Secure subjects showed the greatest context effect for positive interpersonal outcomes, whereas avoidant subjects showed the greatest context effect for negative outcomes.

In addition, there was some evidence that context effects in the lexical decision task were most pronounced in domains that are of particular concern to the different attachment styles. Specifically, differences between the styles were clearest in the sphere of trust, which was also the domain where the expectations of avoidant and secure subjects were most discrepant in the Study 1 questionnaire data. Although the reason for nonsignificant findings in the domains of closeness and dependency remains unclear, it seems plausible that these domains are less relevant or salient to avoidants. Seeking closeness and depending on someone are not behaviors that avoidant individuals are likely to perform; therefore, they may have less clearly articulated expectations for the consequences of those kinds of interpersonal interactions. However, as mentioned earlier, past research has shown that trusting others is a particularly relevant concern for avoidants. For example, significant negative correlations are generally obtained between scores on trust scales and avoidance scales. Deutsch (1973) defined trust as "confidence that one will find what is desired from another, rather than what is feared" (p. 188). It is precisely this kind of confidence that avoidants seem to lack.

These studies can be seen as part of a shift that is under way in the conceptualization of how social information is processed. Whereas past research has often focused on cognitive structures representing the characteristics of self or other in isolation, attention is shifting toward the scripts people form of their interactions with others. Across many domains, researchers are beginning to emphasize relational schemata, or "cognitive structures representing regularities in patterns of interpersonal relatedness" (Baldwin, 1992, p. 461). In the attachment literature, for example, Sroufe and Fleeson (1985) emphasized infants' expectations regarding caregiver responsiveness. In their words, "an ambivalent child thus seems to have internalized an ambivalent relationship; an empathic child to have internalized a responsive relationship" (p. 61). Similarly, Crittenden (1990) discussed the importance of procedural memory as the experiential basis of expectancies. Bretherton (1985, 1990) speaks explicitly of the event schemata, or scripts, that develop in interaction with significant others. She discusses a hierarchy of social knowledge, in which general working models of significant others (e.g., "My mother is a loving person") are derived from lower-level interactional scripts (e.g., "When I hurt myself, my mommy always comes to comfort and help me," Bretherton, 1990, p. 247).

The lexical decision task seems ideal for studying the if-then contingencies that make up such interpersonal scripts. This approach takes a task that has been used to assess networks of declarative knowledge and extends it to procedural knowledge about social events. The methodology could fruitfully be applied to many domains of personality and social psychology. Depression researchers, for example, might be interested to know whether, for some people, "If I fail, then others will . . ." would facilitate processing of the target word *reject*. Similarly, researchers interested in sexual assault and the rape myth (e.g., Malamuth & Donnerstein, 1982) might wish to assess whether, for some men, "If I am sexually aggressive, she will . . ." would facilitate processing of the target word *enjoy*. The study of these and other similar questions might be especially aided by one advantage of the lexical decision task that we have noted—namely, that it may be sensitive to interpersonal expectations that an individual may not be willing to admit to on a questionnaire or may not even be aware of (e.g., Bowlby, 1980; Kihlstrom, 1987). This task has the potential of assessing the networks of declarative and procedural knowledge that automatically shape people's interpretation of social

experiences without the mediation of deliberate, controlled processing (see also Devine's, 1989, discussion of the automatic and controlled components of stereotyping and prejudice).

Social cognitive research has generated a set of powerful models and methodologies for studying how people construe the various elements of their social world. Many research questions remain, however, particularly regarding the processing of specifically interpersonal information. In the future, one focus should be on relational schemata, which include schemata for self and other as experienced in a given relationship, embedded in a script for expected patterns of interaction. When we know more about what people expect in their social world, we will be better able to understand why they think, feel, and act the way they do.

NOTES

1. The reported results are for the outcome targets that were intended for use in the lexical decision task as well (see Table 1). For each context sentence in the questionnaire, we also included two additional outcomes (one positive and one negative) that also represented common themes in the Phase 1 data. If these outcomes are included in the analyses, the two-way interaction does not reach conventional levels of significance ($p = .13$), and the three-way interaction is only marginally significant ($p = .061$). We suspect that these additional items, which were added in hopes of increasing reliability, may instead have diluted the sensitivity of the response categories.

2. The data were also analyzed comparing subjects who answered the questionnaire in terms of "partners in general" and those who had their current partner in mind. The only significant difference was that ratings by those who were thinking about their current partner were more positive overall. The pattern of means was quite similar for the two groups, however. Those who were thinking about their current partner showed the significant three-way interaction. Ratings of those who answered about partners in general showed a marginally significant three-way interaction and also a significant two-way (Style × Valence) interaction. Inspection of the means showed that the major difference between these two subsamples seemed to be that anxious/ambivalent subjects in this second group were more negative and pessimistic across all domains than those who were thinking about a current relationship. It would be unwise to read too much into these differences, however, given that some means (e.g., in the anxious/ambivalent group) were based on as few as six subjects.

3. To reduce variability associated with the first time a given target is seen, all the target words were exposed exactly once during the sets of practice trials.

4. Only correct responses were analyzed. On some trials (1.34%, or fewer than 1 per subject on average), subjects took longer to respond than the 1,500 ms we allotted for collection of their response. On these trials, the maximum reaction time of 1,500 ms was assigned. In addition, subjects responded incorrectly on 3.39% of trials, responding "word" to nonwords or vice versa. These trials were randomly distributed across stimulus conditions and so were excluded from analyses. In two cases, subjects responded incorrectly to both trials of one of the interpersonal context-target pairs, and so no correct response was available for that pair; therefore, those subjects were dropped from analyses.

5. The covariates were included to control for variability in overall reaction speed.

6. There were no gender effects on preliminary analyses, and so all subsequent analyses were collapsed across gender.

7. These a priori contrasts were done in the absence of a significant Relatedness × Congruency interaction and so should not be interpreted as evidence of an interaction as such. The only other significant effect in the overall analysis was a three-way interaction that simply reflected the uninteresting finding that some target words were identified more quickly than others.

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