Affectionate Behavior in Adult Platonic Friendships
Interpreting and Evaluating Expectancy Violations

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Affection is a central component of communicative processes in close personal relationships. Despite its importance, however, individuals expressing affection can incur a number of interpersonal risks, especially in nonromantic relationships where opportunities for misattribution on the part of the recipient may be high. Therefore, it is important to understand individuals’ expectations for the kind and intensity of affectionate behavior they anticipate in their personal relationships. Although extant research has identified a number of influences on expectancies for affection, this study extends existing knowledge by examining how individuals react to expectancy-violating changes in affectionate behavior. An experiment involving 40 pairs of adult platonic friends revealed that unexpected changes in affectionate involvement produce changes in cognitive assessments and behavioral reactions on the part of the recipient, and that violative situations are differentially valenced according to the direction of change in affectionate involvement. These findings are interpreted as support for the tenets of expectancy violations theory.

Affectionate communication is critical for the development, definition, and maintenance of personal relationships. Most forms of communication carry some type of relational meaning in addition to their literal meaning (Watzlawick, Beavin, & Jackson, 1967). For example, when one relational partner expresses fear or anxiety to another, he or she is also implicitly communicating a perception of trust for the other. With affectionate expressions, however, the relational meaning is

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often more overt. Thus, when one partner says “I love you,” the expression communicates an explicit meaning about the other and about the state of their relationship (i.e., that it is a relationship characterized by love). Indeed, relational development is often gauged by the occurrence of such expressions; for example, relational partners often remember the first hug, the first kiss, or the first time the words “I love you” were spoken (see Owen, 1987).

In spite of its importance, affectionate communication invites certain risks. First, many affectionate behaviors can invoke multiple attributions, particularly in nonromantic relationships, in which the intended meaning behind the expression may not be readily apparent. A verbal expression of love, for example, may be intended to express platonic love but may be interpreted by the recipient as a romantic sentiment. Moreover, as Booth-Butterfield and Trotta (1994) reported, expressions of affection are not always interpreted as sincere but may be attributed to ulterior motives, such as an attempt to advance relational commitment or sexual involvement; indeed, affectionate behaviors may be used strategically for these and other purposes. In addition, an affectionate gesture may not be reciprocated by the recipient, leaving the sender in a potentially face-compromising position (Shimanoff, 1985). Finally, senders risk social censure if they engage in affectionate displays at an inappropriate time or place; for example, a passionate kiss may be welcomed at home but not during a church service.

The simultaneous importance and risk associated with affectionate communication bring to the forefront questions regarding people's expectancies for appropriate behavior. Although expressions of affection within personal relationships are often positive and affirming, how do individuals respond when relational partners express greater or lesser amounts of affection than one considers appropriate or expected? Although most empirical research on affectionate communication has focused on actual behaviors, recent studies have begun to identify the factors influencing individuals' expectations for affection within their relationships. This study extends this line of research by examining the cognitive and behavioral responses associated with expectancy-violating changes in affectionate behavior. This article first summarizes extant research on the communication of affection, and then applies the tenets of expectancy violations theory to the task of predicting how unexpected changes in affection are judged.1

AFFECTIONATE COMMUNICATION

It is important to distinguish between “affection,” an internal psychological state of positive, often intimate regard for another, and “affectionate
communication," the direct or indirect expression of affectionate feelings for the other. The former has been studied primarily as an emotional state. Operational definitions, such as the affection subscale of the Role Behavior Test (Foa & Foa, 1974), focus on feeling liked and trusted. Indeed, some studies have used measures such as Rubin's (1970) liking and loving scales as operational definitions of affection (e.g., Sprecher, 1987). The focus of this study, however, is on the communication of affection. The majority of studies on affection have examined influences in people's actual affectionate behaviors rather than on their expectancies for affection. For instance, affectionate communication has been studied in day care settings (Acker & Marton, 1984; Twardosz et al., 1987); in developing romantic relationships (Booth-Butterfield & Trotta, 1994; Owen, 1987); in families (Floyd, 1997a; Noller, 1978); and in public (Greenbaum & Rosenfeld, 1980) and private (Rabinowitz, 1991) settings.

Although these studies illustrate influences on, and effects of, people's actual affectionate behavior, fewer studies have addressed specifically individuals' expectancies for affection within their relationships. However, in a program of research on affectionate communication, Floyd (1997b, 1997c, in press; Floyd & Morman, 1997; Floyd & Voloudakis, in press; Morman & Floyd, in press) has found evidence that affectionate interaction is guided by a number of expectancies. In line with studies reporting differences based on biological gender, Floyd (1997b) has reported that individuals expect women to be more affectionate than men and consider affectionate behavior to be less appropriate in male-male relationships than in those involving women. These expectancies are qualified by others, however. Floyd and Morman (1997) reported that affectionate communication is more expected in familial relationships than among nonrelatives, the proscription against male-male affection being attenuated when the men are related.

These studies provide insight into the factors that influence people's expectancies for affectionate communication and how expectancies and behaviors may work in tandem. Unaddressed, however, is the question of how expectancy-violating affectionate behaviors are assessed and addressed. If one relational partner expresses affection in a way that surprises the other, for example, a host of cognitive and behavioral responses on the part of the recipient are possible. In his case study detailing the therapeutic benefits and psychological risks associated with hugging in a men's therapy group, Rabinowitz (1991) reported that under the right conditions, embracing can aid therapeutic efforts by creating a sense of trust, inclusion, and acceptance between counselors and clients. However, he echoed warnings provided by others (e.g., Alyn, 1988) that if the embrace comes as an unwelcome surprise on the part of the recipient, it can reinforce the unequal power relationship already existing between the counselor and client and may even be interpreted as a sexual advance.
Therefore, understanding how individuals judge and respond to unexpected expressions of affection can advance our understanding of communicative processes in close personal relationships. One theoretic framework from which issues of behavioral appropriateness and expectedness can be addressed is expectancy violations theory (EVT) (Burgoon, 1978, 1995; Burgoon & Hale, 1988). This experiment applies EVT to the task of examining the influences on individuals' responses to expectancy-violating situations involving affectionate interaction in established relationships.

Expectancy Violations Theory

The underlying premises of EVT are that individuals hold expectations for their own and others' behaviors in interactions, and that expectancy violations heighten arousal and initiate a series of cognitive appraisals on the part of the recipient. For one, the recipient judges the extent of the discrepancy between expected and observed behaviors. If the observed behavior deviates only slightly from what was expected, it may simply be forgiven or overlooked, or it may be subsumed as part of the range of expected behaviors.

Larger deviations invite further appraisals regarding the nature of the violative act and the characteristics of the violator. Attention first is turned to assigning meaning to the behavior itself. Although some behaviors may have a consensually shared meaning that dictates their valence (e.g., an obscene gesture), many others have multiple potential interpretations (e.g., a personal space violation can signal intimacy or affection, but it may also signal an attempt to dominate or intimidate). When an unexpected behavior is ambiguous in meaning, an assessment is made regarding the violator's reward level. People who are physically attractive, credible, powerful, famous, or with whom a recipient has a close relationship are generally considered more rewarding than those who do not possess such characteristics (Burgoon, 1978; Burgoon & Hale, 1988; Burgoon & Le Poire, 1993; Burgoon, Stacks, & Burch, 1982; Burgoon & Walther, 1990).

These assessments result in the assigning of a "valence" to the expectancy violation that is based on their assessment of the behavior itself and of the sender. When an unexpected behavior carries a positive interpretation or is enacted by a rewarding communicator, the violation is considered to be positive. Unexpected behaviors that carry negative meanings or that are enacted by nonrewarding communicators are seen as negative violations. For example, an unexpected increase in affection may be considered a positive violation if enacted by someone highly regarded, but a sudden increase in interpersonal distance from the same person may constitute a negative violation.
It is worth noting, too, that there are at least two ways in which a given behavior can be considered expected. Some behaviors are expected because of their general tendency to occur; for example, employees may expect an annual raise in salary because they receive one every year. Staines and Libby (1986) referred to these expectancies as predictive. Other behaviors are expected because they are appropriate or favorably judged; for example, employees may expect a raise because it would be the right thing for management to do. Staines and Libby called these “prescriptive expectancies” (or, alternatively, evaluations). Although the predictive and prescriptive aspects of expectancies often coincide, they are not necessarily correlated; for example, certain behaviors may be expected even if they are not considered appropriate, and vice versa. Therefore, examining both dimensions of expectedness will yield a more complete picture of how expectancies operate. In line with previous research on EVT, we use the term expectations to refer to predictive expectancies and the term evaluations to refer to prescriptive expectancies.

Since its introduction, EVT has engendered a good deal of empirical support in a number of content areas (for a review, see Burgoon, 1995). This study applies EVT to the task of explaining reactions to expectancy-violating affectionate communication in nonromantic dyadic relationships. Because the overt expression of affection is often associated with romantic love (Floyd & Morman, in press), affectionate expressions in nonromantic relationships may invite a wider range of potential causal inferences and may more often be violative of expectancies than they might be in romantic relationships.

HYPOTHESES AND RESEARCH QUESTIONS

Cognitive Responses to Expectancy Violations

To examine the differential effects of positive and negative violations, it is necessary first to confirm that the violations are valenced in the direction predicted. To examine the effects of communicator reward level, some previous studies have created rewarding and less-rewarding treatment conditions using varying operational treatments of communicator reward. Burgoon and Hale (1988), for example, compared dyads of friends with dyads of strangers, confirming that friends were considered more rewarding conversational partners because of their familiarity with each other. In this study, however, we use only dyads of friends. Although it may be informative to compare friends with strangers on some behaviors, we felt it impractical for the study of affection, fearing that manipulating affectionate communication between strangers would be too
implausible to attempt. Therefore, in line with Burgoon and Hale (1988), we assume that senders in this study will be considered rewarding communicators.

Because of EVT's prediction that people desire connection with rewarding others, we hypothesized that unexpected increases in affection would constitute a positive expectancy violation, whereas unexpected decreases would be considered a negative violation. Thus, within adult platonic friendships, we hypothesized:

H1: Increases in affection lead to more positive evaluations over time, whereas decreases in affection lead to less positive evaluations over time.

Confirming that increases in affection are considered positive and that decreases are considered negative would allow us to examine the effects of these violations. EVT predicts that violative acts trigger cognitive appraisal mechanisms and heighten attention to characteristics of the sender. As a result, attitudinal assessments of the sender should be different in violative situations than in baseline, nonviolative situations, and should further differ according to whether the violation is positively or negatively valenced.

Empirical tests have provided support for EVT's predictions with respect to a number of interpersonal behaviors, including proximity (Burgoon, 1978, 1991; Burgoon & Aho, 1982; Burgoon & Jones, 1976; Burgoon & Walther, 1990); gaze (Burgoon, Coker, & Coker, 1986; Burgoon, Manusov, Mineo, & Hale, 1985); touch (Burgoon, 1991; Burgoon & Walther, 1990; Burgoon, Walther, & Baesler, 1992); immediacy (Burgoon & Hale, 1988); conversational involvement (Burgoon, Newton, Walther, & Baesler, 1989; Burgoon, Olney, & Coker, 1987); pleasantness (Burgoon & Le Poire, 1993; Burgoon, Le Poire, & Rosenthal, 1995); and affection (Floyd & Morman, 1997; Floyd & Voloudakis, in press). These experiments have indicated that for rewarding communicators, positively violating behavior elicits more positive assessments of the sender than does conformity to normative behavior, whereas negative violations engender more negative outcomes. Following the theory, we hypothesized the same.

A variety of outcome measures have been used to examine cognitive responses to expectancy violations, including the credibility, attractiveness, and persuasiveness of the sender and the nature of the relational messages he or she is seen as sending (Burgoon et al., 1986; Burgoon et al., 1989; Burgoon et al., 1992). In line with previous research, this experiment looked specifically at the relational messages attributed to senders' behaviors and at judgments of senders' attractiveness and credibility as outcome measures that should be affected by the enactment and valence of violative behavior. Following EVT, we predicted that positive violations would cause receivers to evaluate senders more positively, whereas nega-
tive violations would engender a significantly less positive assessment of senders. Specifically, in platonic friendships, we predicted:

H2: Unexpected increases in affection lead receivers to see senders as (a) more attractive, (b) more credible, and (c) communicating more positive relational messages. In contrast, unexpected decreases in affection lead receivers to see senders as (d) less attractive, (e) less credible, and (f) communicating less positive relational messages.

Behavioral Adaptation to Expectancy Violations

The preceding predictions focused specifically on cognitive assessments made by naive participants in reaction to expectancy-violating situations. However, noticeable changes in a sender’s behavior over time often also elicit adaptation behaviors on the part of the receiver. As Burgoon, Le Poire, et al. (1995) demonstrated, different theoretic approaches offer conflicting predictions about whether people will reciprocate or compensate for others’ behavioral changes. Although equilibrium theory (Argyle & Dean, 1965) gives primacy to compensation, other approaches, such as expectancy signaling (Rosenthal, 1976), suggest that reciprocity is the rule. EVT, however, predicts reciprocity in some expectancy-violating situations and compensation in others. The causal mechanisms are the reward level of the violator and whether the violator is increasing or decreasing engagement with the partner. Specifically, in high-reward relationships such as close personal friendships, EVT predicts that recipients will reciprocate attempts by the communicator to increase affectionate involvement, to reap the benefits of increased access to the communicator’s rewards. Conversely, movements on the part of communicators to decrease affectionate involvement should initiate compensatory behavior on the part of recipients, who will attempt to maintain the previous level of engagement with the rewarding individual by compensating with increased involvement themselves (Hale & Burgoon, 1984; Manusov, 1995; Noller, 1984).

Predicting reciprocity in situations of increased affection and compensation in situations of decreased affection leads us to expect that recipients of either increased or decreased affection will respond by increasing their own affectionate behavior. Thus, on the assumption that friendships will be considered high-reward relationships, we hypothesized the following:

H3: Unexpected changes in affectionate behavior are associated with increases in (a) immediacy, (b) expressiveness, and (c) positive affect on the part of receivers.

Another way to conceptualize the predicted behavioral response is as a function of synchrony, or the degree to which communicators match each
others’ behaviors. If changes in affectionate behavior are met with increases in immediacy, expressiveness, and positive affect, this translates into increased behavioral synchrony in the case of increased affection, and decreased synchrony in the case of decreased affection. Thus, we hypothesized the following:

H4: Unexpected increases in affectionate behavior are associated with increased behavioral synchrony on the part of receivers, whereas unexpected decreases in affectionate behavior are associated with decreased behavioral synchrony on the part of receivers.

Gender and Gender Composition Effects

Most research on affectionate behavior among adults has attempted to identify factors that influence its occurrence and intensity. Chief among these has been the gender configuration of those in the relationship in which the behavior is occurring. Within the scope of EVT, issues surrounding gender and dyadic gender composition may be important to address due to their potential for influencing predictive and prescriptive expectancies. Most studies have reported less frequent and less intense affectionate interaction in male–male dyads than in female–female or opposite-gender pairs (Greenbaum & Rosenfeld, 1980; Shuntich & Shapiro, 1991). Other studies have found main effects for the gender of the communicator, such that women are more affectionate than men regardless of the gender of the recipient (Floyd, in press; Rabinowitz, 1991; Sprecher & Sedikides, 1993). These differences in central tendency can translate into different predictive expectancies for affectionate behavior in male–male, female–female, and male–female relationships.² They also may influence, or be influenced by, prescriptive expectancies indicating that such behavior is more appropriate in female–female and cross-gender pairs than between two men (see Floyd, 1997b, 1997c). We tested these predictions by examining gender differences in the level of conversational immediacy, expressiveness, and positive affect exhibited in the premanipulation interaction. Specifically:

H5: Women demonstrate greater (a) immediacy, (b) expressiveness, and (c) positive affect than do men.

Because previous research also has suggested that gender differences in affection are magnified in same-gender dyads, we hypothesized an ordinal interaction between gender and gender composition (i.e., whether the dyad is same-gender or opposite-gender):
H6: Gender and gender composition interact to affect (a) immediacy, (b) expressiveness, and (c) positive affect, such that the difference between women and men is greater in same-gender relationships than in opposite-gender relationships.

These predictions address the extent to which gender or gender composition influence nonmanipulated levels of affectionate behavior. If they do, the potential exists that they also may moderate the effects of expectancy violations on cognitive and behavioral outcomes. To investigate this potential, we posed the following research questions:

RQ1: To what extent, if any, does gender moderate the effects of expectancy violations on (a) cognitive assessments of senders, and (b) behavioral responses on the part of receivers?
RQ2: To what extent, if any, does the interaction between gender and gender composition moderate the effects of expectancy violations on (a) cognitive assessments of senders, and (b) behavioral responses on the part of receivers?

METHOD

Participants

Participants were 40 men and 40 women comprising 40 dyads of adult platonic friends. At least one person in each dyad was recruited from an introductory communication course at a large university in the southwestern United States. Ages ranged from 18 to 44, with an average of 20.36 years ($SD = 2.92$). Participants were recruited for a "study of how close friends talk to each other about their friendship." Each was asked to bring either a same-gender friend ($n = 20$) or an opposite-gender friend ($n = 20$) with him or her to the study.3 As described subsequently, preinteraction measures were taken of the intimacy level and general rewardingness of the dyadic relationships, using scales ranging from 1 to 7. The friendships in this study had a mean intimacy score of 4.91 ($SD = 1.10$), and a mean rewardingness score of 6.04 ($SD = 0.89$).

Procedure

Upon arrival at the communication laboratory, participants were told that they would be engaging in two conversations regarding their thoughts and feelings about their friendship with each other, and that the conversations would be videotaped from behind a one-way window.
After participants consented, they were assigned to confederate and native participant roles, and completed preinteraction measures of relational intimacy and general rewardingness. Participants then engaged in the first of two experimental conversations about their relationship. Two topics were provided to participants on index cards as a means of guiding their conversation; four topics in total were used in the study, and their order of administration was counterbalanced across dyads. This premanipulation conversation provided a baseline level of affectionate involvement.

At the conclusion of the first conversation, participants were separated, ostensibly to complete some questions about their interaction. The naive participant remained in the laboratory area to complete postinteraction measures of expectedness, evaluation, and relational messages. The confederate was ushered into a back room to receive the experimental induction. The confederate first completed a measure of how affectionate he or she was during the initial interaction, which included marking an “X” on a 7-interval bipolar scale, ranging from low to high affection level. The confederate then was induced either to greatly increase or greatly decrease affectionate involvement during the second interaction.

Following the induction, participants were reunited for the second interaction, instructions for which were identical to the first. Two new topics of conversation were provided. Unbeknownst to either participant, the video camera behind the one-way window began tapping again as soon as the confederate reentered the room, to capture all postmanipulation behavior directed toward the naive participant even before the second conversation began. At the end of the second interaction, participants again were separated. The naive participant completed postinteraction measures of expectedness, evaluation, and relational messages, and the confederate completed a measure of how affectionate he or she was during the second conversation. Both participants were then debriefed and excused.

Experimental Manipulation

Those in the high affection condition were asked to increase the extent to which they communicated a sense of closeness, liking, affection, and appreciation toward the naive participant, and asked to do so using whatever behaviors would be interpreted by the naive participant as having these meanings. Those in the low affection condition were asked to decrease their involvement in the second interaction and to communicate messages of distance, disinterest, and coldness to the naive participant, again using whichever behaviors would be interpreted as such by the naive participant.

There were several options available for creating an appropriate induction. Some studies of communication expectancies have instructed
confederates to manipulate specific behaviors, such as particular forms of touch (e.g., Burgoon et al., 1992). Others have induced multicue manipulations, wherein confederates are instructed to increase or decrease multiple designated behaviors (e.g., Guerrero & Burgoon, 1996). We elected in this study to follow Palmer and Simmons (1995) and instruct confederates to change the level at which they were communicating messages of affectionate involvement (affection, closeness, liking, affiliation) but not to instruct them to manipulate any specific behaviors to do so. Given the range of behaviors relational partners use to communicate affection (Floyd & Morman, in press), we decided to allow confederates to make their own decisions about which specific behaviors to change. We felt this approach offered the greatest ecological validity, increasing the chances that the changed behaviors would in fact communicate changed levels of affection to the naive participants.

As a means of helping the confederate to conceptualize the desired change, the confederate was referred to the 7-interval scale on which he or she marked an “X.” Those in the high affection condition were asked to conceive of the behavior(s) that would have caused their “X” to be two intervals higher than it was; conversely, those in the low affection condition were asked to behave how they would if they wanted their mark to be two notches lower than it was. In both conditions, the confederate was instructed to begin acting differently toward the naive participant from the time they were reunited and to maintain the manipulation throughout the second conversation.

Preinteraction Measures

Relational intimacy was measured with the Intimate Friendship Scale (Sharabany, 1974, 1994). The scale consists of 32 items assessing frankness—spontaneity, sensitivity—knowing, attachment, exclusiveness, giving—sharing, imposition, common activities, and trust—loyalty. Scores fall in a theoretic range of 8 to 56, with higher scores indicating greater intimacy. Coefficient alpha in the present study was .96. General rewardingness was measured with five 7-point Likert-type items developed for this study. The items assess how rewarding and enjoyable partners find their relationship and interactions with each other to be. The overall rewardingness score is the mean of the five items; scores fall in a theoretic range of 1 to 7, wherein higher scores indicate greater rewardingness (α = .88).

Confederates’ Postinteraction Measures

Confederates’ self-reported affection level was measured with four 7-point Likert-type items taken from the affection subscale of the Role
Behavior Test (Foa & Foa, 1974).\(^9\) Scores have a theoretic range of 1 to 7, with higher scores indicating greater affection (coefficient \(\alpha = .93\)).

Participants' Postinteraction Measures

Expectedness and evaluation of confederates' behavior were assessed with ten 7-point Likert-type items developed by Burgoon et al. (1989).\(^{10}\) Five items each assess how expected the confederates' behavior was (\(\alpha = .75\)) and how positively their behavior was evaluated (\(\alpha = .90\)). Relational messages were assessed using seven subscales taken from the factor-based Relational Communication Scale (Burgoon & Hale, 1987). The subscales assessed immediacy (\(\alpha = .85\)), similarity (\(\alpha = .84\)), receptivity-trust (\(\alpha = .94\)), composure (\(\alpha = .93\)), dominance (\(\alpha = .54\)), formality (\(\alpha = .58\)), and equality (\(\alpha = .84\)). Target credibility was assessed using twelve 7-point bipolar adjective scales developed by McCroskey and Young (1981).\(^{11}\) Six items each are designed to measure two separate aspects of credibility: competence (\(\alpha = .79\)) and character (\(\alpha = .86\)). Attraction was measured with eight 7-point Likert-type items developed by McCroskey and McCain (1974).\(^{12}\) Four items each measure social attractiveness (\(\alpha = .88\)) and task attractiveness (\(\alpha = .79\)). Scores on all postinteraction scales represent the mean of the items in that scale and have a theoretic range of 1 to 7, wherein higher scores indicate a greater level of the variable.\(^{13}\)

Coding of Nonverbal Behavior

Following completion of each interaction, four trained coders rated the behaviors (immediacy, expressiveness, affect, synchrony) separately for the naive participants and confederates in each conversation. Two coders were volunteers and two received course credit in exchange for their work; all had completed advanced coursework in nonverbal communication and were blind to the experimental manipulations. The specific behaviors coded were drawn from among those commonly used in studies on behavioral adaptation, including Burgoon, Le Poire, et al. (1995); Guerrero and Burgoon (1996); Manusov (1995); and Palmer and Simmons (1995). Behaviors were coded using 7-point bipolar adjective scales, wherein higher scores indicate a greater presence, frequency, or intensity of the behavior.\(^{14}\) Immediacy behaviors were: involvement, engagement, frequency of touch, physical proximity, lean, immediacy, body orientation, and postural attentiveness (\(\alpha = .81\)).\(^{15}\) Expressiveness behaviors were: animation, vocal expressiveness, frequency of gestures, and facial expressiveness (\(\alpha = .72\)). Positive affect behaviors were: smiling, pleasant facial expression, head nods, relaxed laughter, facial orientation, and vocal pleasantness (\(\alpha = .77\)). Finally, synchrony behaviors were: coordination
with partner, matching partner's gestures, mirroring partner's posture, matching partner's vocalics, and smoothness of turn exchanges (α = .69).

Coders received approximately 6 hours of individual and collective training and practice. Coders worked in pairs, with two coding immediacy and expressiveness and the other two coding positive affect and synchrony. Coders watched the first conversation in its entirety, coded the behaviors observed in that conversation, and then repeated the process with the second conversation.16 This approach was employed to capture global changes in naive participants' behaviors and to correspond with changes in naive participants' global cognitive assessments from Time 1 to Time 2. Intercoder reliabilities, based on Ebel's intraclass correlation (Guilford, 1954), were .91 for immediacy, .89 for expressiveness, .76 for positive affect, and .95 for synchrony.

RESULTS

Manipulation Checks

First, confederates' self-reports of their affection level during each conversation were compared by manipulation. A significant Manipulation × Time interaction emerged, F(1, 38) = 151.51, p < .001, η² = .80. Confederates in the high affection condition reported a significant increase in affectionate behavior from the baseline interaction (M = 5.90, SD = .65) to the postmanipulation interaction (M = 6.59, SD = .54), t(19) = -5.03, p < .001. Likewise, those in the low affection condition reported a significant decrease in affectionate behavior from the baseline interaction (M = 5.88, SD = .82) to the postmanipulation interaction (M = 3.48, SD = .82), t(19) = 11.41, p < .001.

Naive participants' scores on the expectedness of confederates' behaviors during each conversation were compared. A significant decrease in expectedness from the baseline to the postmanipulation interaction would indicate success for both manipulations. As anticipated, expectedness showed a significant decrease from the baseline (M = 5.52, SD = 1.32) to the postmanipulation interaction (M = 4.74, SD = 1.48), t(39) = 1.69, p < .05, η² = .08. The decrease in expectedness occurred both in the high affection condition (Ms = 5.46 at Time 1, 5.09 at Time 2) and in the low affection condition (Ms = 5.58 at Time 1, 4.38 at Time 2).

An experimental assistant blind to the manipulation condition watched both interactions from behind the one-way window and indicated which condition (high or low) had been enacted. This coding showed 92% accuracy with the induced condition.

As reported subsequently, a significant Behavior × Time interaction emerged for naive participants' assessments of confederates' immediacy,
Naive participants in the low affection condition saw confederates as significantly less immediate at Time 2 (M = 4.38, SD = 1.55) than at Time 1 (M = 5.18, SD = 1.21), t(19) = 2.48, p = .01. Those in the high affection condition showed a trend toward greater immediacy at Time 2 (M = 5.37, SD = 1.13) than at Time 1 (M = 5.06, SD = 1.39), t(19) = −1.42, p = .08.

Coders' assessments of confederates' immediacy and expressiveness were compared by time and behavior condition. Time × Behavior interactions emerged for immediacy, $F(1, 32) = 192.45, p < .001, \eta^2 = .86$, and for expressiveness, $F(1, 32) = 91.72, p < .001, \eta^2 = .74$. As expected, confederates in the high manipulation condition significantly increased their immediacy from Time 1 (M = 3.56, SD = .71) to Time 2 (M = 5.25, SD = .90), t(14) = −8.17, p < .001. Likewise, they increased their expressiveness from Time 1 (M = 2.30, SD = 1.27) to Time 2 (M = 4.30, SD = 1.20), t(14) = −4.64, p < .001. Confederates in the low condition significantly decreased their immediacy from Time 1 (M = 4.13, SD = .61) to Time 2 (M = 2.58, SD = .44), t(16) = 10.44, p < .001. They also decreased their expressiveness from Time 1 (M = 4.27, SD = 1.37) to Time 2 (M = 1.81, SD = .73), t(16) = 8.83, p < .001.

Finally, to mitigate its potential confounding effects, conversation length was coded in seconds. The premanipulation conversations averaged 3 minutes, 56 seconds in length (SD = 81.74 seconds). The postmanipulation conversations averaged 4 minutes, 13 seconds in length, including the portion that was taped without the naive participants' knowledge (SD = 74.34 seconds). The durations of the two conversations were positively correlated, $r(31) = .46, p = .017$, and were not significantly different from each other in a pairwise comparison, $t(32) = 1.06, p = .30$. To ascertain whether duration should be statistically controlled in the hypothesis tests, we performed a series of analyses of variance (ANOVAs) with duration as the dependent variable, and we conducted bivariate correlations between duration and the experimental dependent variables. The ANOVAs produced no significant differences in duration as a function of manipulation, gender, gender composition, or interactions between them. Furthermore, duration was nonsignificantly correlated with all of the dependent variables (individual coefficients ranged in magnitude from .02 to .21). These results argue for excluding duration as a covariate in the hypothesis tests.

Omnibus Analyses

The cognitive variables of expectedness, evaluation, seven relational themes, competence, character, and social and task attractiveness were analyzed using 2 (Behavior Manipulation: High vs. Low) × 2 (Gender of
Confederate: Male vs. Female) × 2 (Gender Composition of Dyad: Same-Gender vs. Opposite-Gender) × 2 (Time: Premanipulation vs. Postmanipulation) mixed-model multivariate analyses of variance (MANOVAs), with manipulation, gender, and gender composition as between-subject factors and time as the within-subjects factor. The dependent measures were analyzed in groups when they were conceptually related and had significant intercorrelations and Bartlett tests of sphericity. Expectation and evaluation \(r = .51, p < .01; \text{Bartlett } \chi^2 = 117.19, df = 1, p < .00001\) were analyzed in a MANOVA that produced the hypothesized multivariate Behavior × Time interaction, Wilks’s Λ = .70, \(F(2, 31) = 6.52, p = .004, R^2 = .30\). Social and task attractiveness \((r = .51, p < .01; \text{Bartlett } \chi^2 = 80.13, df = 1, p < .00001)\) were analyzed in a second MANOVA that produced multivariate effects for behavior, Wilks’s Λ = .80, \(F(2, 31) = 3.84, p = .032, R^2 = .20\), and for time, Wilks’s Λ = .82, \(F(2, 31) = 3.50, p = .043, R^2 = .18\). Competence and character \((r = .54, p < .01; \text{Bartlett } \chi^2 = 100.24, df = 1, p < .00001)\) were analyzed in the third MANOVA, which produced the hypothesized multivariate Behavior × Time interaction, Wilks’s Λ = .73, \(F(2, 31) = 5.82, p = .007, R^2 = .27\). The relational themes of immediacy, similarity, receptivity, and composure \((r = .50, p < .01; \text{Bartlett } \chi^2 = 265.12, df = 3, p < .00001)\) were analyzed together in a fourth MANOVA that produced multivariate effects for behavior, Wilks’s Λ = .67, \(F(4, 29) = 3.53, p = .018, R^2 = .32\), and for the Behavior × Time interaction, Wilks’s Λ = .62, \(F(4, 29) = 4.46, p = .006, R^2 = .38\). The relational themes of dominance, formality, and equality \((r = .44, p < .05; \text{Bartlett } \chi^2 = 50.74, df = 2, p = .00001)\) were analyzed together in a fifth MANOVA that produced multivariate effects for behavior, Wilks’s Λ = .67, \(F(3, 30) = 4.84, p = .007, R^2 = .33\), and for the Behavior × Time interaction, Wilks’s Λ = .76, \(F(3, 30) = 3.20, p = .037, R^2 = .24\).

Due to mechanical problems with the video equipment, seven dyads were not properly recorded, and so they were left out of the analyses for the behavioral variables. Fortunately, four of the missing dyads were in the high affection condition and three were in the low condition, so their omission should not cause an imbalance in the manipulation cells. The four behavioral variables of the naive participants’ immediacy, expressiveness, positive affect, and synchrony \((r = .45, p < .05; \text{Bartlett } \chi^2 = 99.47, df = 3, p < .00001)\) were analyzed in a sixth MANOVA that produced a near-significant Behavior × Gender Composition × Time interaction, Wilks’s Λ = .60, \(F(6, 20) = 2.23, p = .08, R^2 = .40\), as well as the hypothesized Behavior × Time interaction, Wilks’s Λ = .14, \(F(6, 20) = 20.99, p < .001, R^2 = .86\). Additionally, the significant multivariate main effect for time called for in H3 emerged, Wilks’s Λ = .50, \(F(6, 20) = 3.39, p = .01, R^2 = .50\).
Cognitive Hypotheses

The first hypothesis predicted that naive participants in the high affection condition would evaluate confederates' behavior more positively in the postmanipulation conversation (Time 2) than they would in the premanipulation conversation (Time 1), whereas naive participants in the low condition would show the opposite pattern. The univariate Behavior x Time interaction was significant, $F(1, 32) = 13.45, p = .001, \eta^2 = .30$. As expected, scores for those in the high condition showed a significant increase from Time 1 ($M = 5.56, SD = 1.24$) to Time 2 ($M = 5.89, SD = 0.97$), $t(19) = -1.93, p = .04$. Mean scores for those in the low affection condition showed the hypothesized decrease from Time 1 ($M = 5.71, SD = 1.19$) to Time 2 ($M = 4.48, SD = 1.77$), $t(19) = 3.27, p = .002$. H1 is confirmed.

The second hypothesis suggested that the move from baseline to a positive violation would increase receivers' assessments of senders' attractiveness, credibility, and the extent to which senders were communicating positive relational messages, whereas the move to a negative violation would have the opposite effects. Significant univariate Time x Manipulation interactions obtained for receivers' assessments of senders' immediacy, similarity, receptivity, composure, formality, equality, and character, with only the effect for equality failing to achieve significance at the traditional .05 alpha level. Univariate interaction effects are reported in Table 1.

One-tailed $t$ tests were used to probe the hypothesized relationships. As Table 2 shows, mean differences indicated that naive participants in the high affection condition saw confederates as more immediate, more similar and more equal to themselves, more composed, less formal, and as having greater character at Time 2 than at Time 1; however, only the effect for character achieved statistical significance. By comparison, those in the low affection condition showed more substantial changes in cognitive assessments. Naive participants in this manipulation saw confederates as less immediate, less similar to themselves, less receptive, less composed, more formal, less equal to themselves, and having lesser character at Time 2 than at Time 1.

If the postmanipulation interaction represents a positive expectancy violation in the high affection condition and a negative violation in the low affection condition, as the results for H1 suggest, then naive participants' cognitive assessments of confederates should be more positive for those in the high condition than for those in the low condition. To confirm this, we further probed the significant Time x Manipulation interactions with simple effect comparisons by manipulation at Time 2.19 As expected, naive participants in the positive violation (high affection) condition saw confederates as more immediate, more similar to themselves, more receptive, more composed, less formal, more equal to themselves, and as having greater character than did naive participants in the negative violation.
### TABLE 1

**F-Test Results for Time × Confederate Behavior Interaction Effects on Receivers' Perceptions**

<table>
<thead>
<tr>
<th>Receivers' Perception</th>
<th>F(1, 32)</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediacy</td>
<td>8.00</td>
<td>.008</td>
<td>.20</td>
</tr>
<tr>
<td>Similarity</td>
<td>8.74</td>
<td>.006</td>
<td>.21</td>
</tr>
<tr>
<td>Receptivity</td>
<td>5.71</td>
<td>.02</td>
<td>.15</td>
</tr>
<tr>
<td>Composure</td>
<td>14.47</td>
<td>.001</td>
<td>.31</td>
</tr>
<tr>
<td>Formality</td>
<td>7.11</td>
<td>.01</td>
<td>.18</td>
</tr>
<tr>
<td>Equality</td>
<td>3.48</td>
<td>.07</td>
<td>.10</td>
</tr>
<tr>
<td>Character</td>
<td>5.59</td>
<td>.02</td>
<td>.15</td>
</tr>
</tbody>
</table>

NOTE: With the exception of formality, values on all dependent variables increased over time for confederates in the high affection condition and decreased over time for confederates in the low affection condition. Judgments of formality followed the opposite pattern.

(low affection condition). Furthermore, naive participants in the positive violation saw confederates’ behavior as more expected and more positive than did naive participants in the negative violation. These comparisons are reported in Table 3.

**Behavioral Hypotheses**

The third hypothesis predicted that naive participants would increase their immediacy, expressiveness, and positive affect from Time 1 to Time 2. Because the prediction was the same for naive participants in both manipulation conditions, main effects for time were explored. As noted previously, time produced a significant multivariate effect for immediacy, expressiveness, and positive affect. However, only the univariate effect for positive affect was significant, \( F(1, 25) = 8.70, p = .007, \eta^2 = .26 \). Contrary to the prediction, naive participants decreased their positive affect from Time 1 (\( M = 4.22, SD = 1.00 \)) to Time 2 (\( M = 3.85, SD = 1.03 \)). Post hoc analysis using two-tailed pairwise \( t \) tests revealed that this effect is attributable to naive participants in the low affection condition, who significantly decreased their positive affect from Time 1 (\( M = 4.30, SD = .83 \)) to Time 2 (\( M = 3.61, SD = .93 \)), \( t(16) = 3.07, p = .007 \). Naive participants in the high affection condition changed their positive affect little from Time 1 (\( M = 4.14, SD = 1.17 \)) to Time 2 (\( M = 4.09, SD = 1.11 \)).

As noted previously, a significant multivariate Behavior × Time interaction effect emerged, accompanied by a trend toward a significant univariate effect for expressivity, \( F(1, 25) = 3.09, p = .09, \eta^2 = .11 \). The means indicated an increase in expressivity from Time 1 (\( M = 3.66, SD = .89 \)) to Time 2 (\( M = 3.96, SD = 1.08 \)) for naive participants in the low affection
### TABLE 2
Mean Comparisons for Univariate Behavior-by-Time Effects on Cognitive Outcomes

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
<th></th>
<th>t(19)</th>
<th>p (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Immediacy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High affection condition</td>
<td>Time 1</td>
<td>5.06</td>
<td>1.39</td>
<td>-1.42</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>5.37</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>Low affection condition</td>
<td>Time 1</td>
<td>5.18</td>
<td>1.21</td>
<td>2.48</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>4.38</td>
<td>1.55</td>
<td></td>
</tr>
<tr>
<td><strong>Similarity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High affection condition</td>
<td>Time 1</td>
<td>5.27</td>
<td>1.05</td>
<td>-1.15</td>
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<tr>
<td></td>
<td>Time 2</td>
<td>5.54</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Low affection condition</td>
<td>Time 1</td>
<td>4.96</td>
<td>1.10</td>
<td>2.84</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>3.93</td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td><strong>Receptivity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High affection condition</td>
<td>Time 1</td>
<td>6.08</td>
<td>.91</td>
<td>-4.5</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>6.14</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Low affection condition</td>
<td>Time 1</td>
<td>5.99</td>
<td>.87</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>4.95</td>
<td>1.67</td>
<td></td>
</tr>
<tr>
<td><strong>Composure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High affection condition</td>
<td>Time 1</td>
<td>5.32</td>
<td>1.44</td>
<td>-1.57</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>5.59</td>
<td>1.26</td>
<td></td>
</tr>
<tr>
<td>Low affection condition</td>
<td>Time 1</td>
<td>5.21</td>
<td>1.47</td>
<td>3.61</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>4.08</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td><strong>Formality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High affection condition</td>
<td>Time 1</td>
<td>2.58</td>
<td>.96</td>
<td>1.33</td>
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<tr>
<td></td>
<td>Time 2</td>
<td>2.28</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td>Low affection condition</td>
<td>Time 1</td>
<td>2.95</td>
<td>1.10</td>
<td>-2.43</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>3.85</td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td><strong>Equality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High affection condition</td>
<td>Time 1</td>
<td>6.35</td>
<td>.56</td>
<td>-1.25</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>6.55</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>Low affection condition</td>
<td>Time 1</td>
<td>6.35</td>
<td>.61</td>
<td>2.67</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>5.43</td>
<td>1.66</td>
<td></td>
</tr>
<tr>
<td><strong>Character</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High affection condition</td>
<td>Time 1</td>
<td>6.19</td>
<td>.73</td>
<td>-2.31</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>6.38</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>Low affection condition</td>
<td>Time 1</td>
<td>6.27</td>
<td>.91</td>
<td>1.88</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
<td>5.63</td>
<td>1.54</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Cell sizes were 20 dyads each for the high affection condition and the low affection condition.
TABLE 3
Comparison for Behavior Manipulation
Effects on Cognitive Outcomes at Time 2 (postmanipulation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>High Affection Condition</th>
<th>Low Affection Condition</th>
<th>t(38)</th>
<th>p (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Expectedness</td>
<td>5.55</td>
<td>.92</td>
<td>4.38</td>
<td>1.71</td>
</tr>
<tr>
<td>Evaluation</td>
<td>5.89</td>
<td>.97</td>
<td>4.48</td>
<td>1.77</td>
</tr>
<tr>
<td>Immediacy</td>
<td>5.37</td>
<td>1.13</td>
<td>4.38</td>
<td>1.55</td>
</tr>
<tr>
<td>Similarity</td>
<td>5.54</td>
<td>1.01</td>
<td>3.93</td>
<td>1.44</td>
</tr>
<tr>
<td>Receptivity</td>
<td>6.14</td>
<td>.74</td>
<td>4.95</td>
<td>1.67</td>
</tr>
<tr>
<td>Composure</td>
<td>5.59</td>
<td>1.26</td>
<td>4.08</td>
<td>1.92</td>
</tr>
<tr>
<td>Formality</td>
<td>2.28</td>
<td>1.09</td>
<td>3.85</td>
<td>1.44</td>
</tr>
<tr>
<td>Character</td>
<td>6.38</td>
<td>.58</td>
<td>5.63</td>
<td>1.54</td>
</tr>
</tbody>
</table>

condition. Naive participants in the high affection condition changed their expressivity only slightly from Time 1 ($M = 3.35, SD = 1.00$) to Time 2 ($M = 3.30, SD = 1.18$). H3 is not supported.

H4 suggested that naive participants in the high affection condition would increase synchrony over time, whereas those in the low condition would reduce synchrony over time. The univariate Behavior x Time interaction effect for synchrony was nonsignificant, $F(1, 25) = .15, p > .05$, probably as a result of low power (power = .06). However, given the directional nature of the hypothesis, planned contrasts were conducted despite the nonsignificant omnibus effect. Naive participants in the high condition did not differ in their synchrony from Time 1 to Time 2, contrary to the first part of the hypothesis. However, naive participants in the low condition reduced their synchrony from Time 1 ($M = 4.72, SD = .90$) to Time 2 ($M = 4.12, SD = .63$), $t(16) = 2.31, p = .035$. H4 is partially supported.

Gender and Gender Composition Effects

H5 and H6 addressed the influence of gender and gender composition on behavior in the premanipulation interaction. H5 and H6 were tested in two ways. First, we compared scores for naive participants' ratings of confederates' immediacy in the premanipulation conversation. The main effect for gender was significant, $F(1, 36) = 4.19, p < .05, \eta^2 = .10$, with the mean immediacy score for female confederates ($M = 5.50, SD = 1.07$) exceeding that of male confederates ($M = 4.73, SD = 1.40$). This main effect, however, must be interpreted in relation to the interaction between gender and gender composition predicted in H6. The Gender x Gender composition interaction was significant, $F(1, 36) = 4.01, p = .05, \eta^2 = .10$. As
anticipated, mean scores for male–male dyads ($M = 4.62$, $SD = 1.56$) were significantly lower than those for female–female pairs ($M = 6.13$, $SD = .57$), $t(18) = -2.89, p = .01$. Mean scores for men ($M = 4.85$, $SD = 1.29$) and women ($M = 4.87$, $SD = 1.10$) in opposite-gender dyads were nearly identical, indicating that the significant main effect for gender is due entirely to differences among those reporting on same-gender relationships.

Further tests of H5 and H6 were conducted by comparing naive participants’ coded behaviors during the premanipulation conversation by gender and gender composition. The multivariate Gender x Gender composition interaction was significant, Wilks’ $\Lambda = .70$, $F(3, 26) = 3.66, p = .025, R^2 = .30$. H6 predicted that the gender differences on immediacy, expressiveness, and positive affect would be greater for same-gender than for opposite-gender relationships. For same-gender friends, women manifested greater immediacy ($M = 5.38, SD = .00$) than did men ($M = 3.69, SD = .89$), $t(10) = -2.57, p = .015$. Women were also more expressive ($M = 4.50$, $SD = .35$) than were men ($M = 3.40, SD = .78$), $t(10) = -1.91, p = .045$. Finally, women exhibited greater positive affect ($M = 4.94, SD = .92$) than did men ($M = 4.00, SD = .72$), $t(11) = -1.88, p = .045$. Among opposite-gender friends, however, men and women did not differ significantly on expressiveness or positive affect, and immediacy scores were actually higher for men ($M = 4.63, SD = .59$) than for women ($M = 3.81, SD = .96$), $t(18) = 2.28, p = .02$. H6 is largely supported. Contrary to H5, there were no significant univariate effects for gender when the coded behaviors were analyzed.

Two research questions asked the extent to which gender and the Gender x Gender composition interaction moderate the effects of expectancy violations on (a) cognitive assessments of senders and (b) receivers’ behavioral responses. Neither gender nor the Gender x Gender composition interaction yielded any moderating effects on cognitive or behavioral responses to expectancy violating behaviors.

**DISCUSSION**

Prior research on affectionate communication has indicated that such behavior is strongly influenced by normative expectancies. Less addressed have been questions surrounding cognitive and behavioral responses to expectancy-violating affectionate behavior. However, because affectionate behaviors may be associated with a number of interpersonal risks, it is important to understand not only what people expect in their relationships, but also how they respond when their expectations are not confirmed. This experiment was designed with this goal in mind.

Several theorists would posit that any violation of expectancies is bound to be evaluated and reacted to negatively. Were that the case, then
we should have seen naive participants reacting negatively, both cognitively and behaviorally, to both increases and decreases in affectionate behavior. However, according to EVT, violations are valenced along a positive-negative continuum, based on the nature of the violative behavior and the receiver's judgments of the sender. Because affection generally is associated with positive relational states, we therefore hypothesized that unexpected increases in affection would constitute a positive expectancy violation, and that unexpected decreases would be a negative expectancy violation. These predictions were supported.

EVT further predicts that positive violations (e.g., increases in affection) are associated with positive cognitive outcomes, whereas negative violations (e.g., decreases in affection) produce negative outcomes. As reported, recipients of increased affection showed change from Time 1 to Time 2 on a few variables; however, statistically significant changes were observed only for naive participants' perception of confederates' character. By contrast, the movement from a baseline conversation to a negative expectancy-violating conversation was associated with significant changes in several outcomes. Naive participants in the low affection condition saw confederates as less immediate, less similar to themselves, less receptive, less composed, more formal, less equal to themselves, and as being of lesser character in the postmanipulation interaction than before the manipulation occurred. This finding is directly in line with EVT's prediction that negative expectancy violations produce negative cognitive assessments on the part of the receiver.

Given EVT's prediction, the fact that change was not observed on more outcomes in the positive-violation condition is somewhat surprising. However, it has been a common finding in expectancy violations research that individuals exhibit more pronounced reactions to negative violations than to positive ones. This appears to be particularly true when the violation involves behavior that is positively valenced to begin with, such as conversational involvement or immediacy (e.g., Burgoon, Le Poire, et al., 1995; Guerrero & Burgoon, 1996; Le Poire & Burgoon, 1994). Burgoon et al. (1989) speculated that a "ceiling effect" makes it difficult to enact genuine positive violations involving behavior that is generally considered to be positive already. To the extent that affectionate communication is such a behavior, naive participants' perceptions may have been confined to exhibiting only moderate changes in response to increased affectionate behavior.

We further probed the Manipulation X Time interaction by comparing cognitive outcomes at Time 2 associated with those in the high affection and low affection conditions. Specifically, we anticipated that those in the positively violative situation would see their situation as more expected, would evaluate their situation more favorably, would attribute more positive relational messages to the violators' behaviors, and would see the
violator as more attractive and more credible than would those whose expectations had been negatively violated. In line with EVT, naive participants in the high condition reported higher scores on expectedness, evaluation, immediacy, similarity, receptivity, composure, equality, and character, and lower scores in formality, than those in the low condition.

Collectively, these findings on cognitive assessments provide support for EVT's predictions within the context of affectionate behavior in interpersonal relationships. As noted previously, we elected in this study to examine platonic, nonromantic friendships because of the potential for affectionate expressions to instigate a wider range of attributions than they might in romantic relationships. We would speculated that, because affection is so often associated with romance, it would be harder to positively violate expectancies for affection in romantic than nonromantic relationships, but easier to negatively violate them. That is, relative to platonic friends, romantic partners would have to increase affectionate behaviors more to induce a positive violation, but would have to reduce them less to induce a negative violation. This is, of course, an empirical question that must be deferred to future studies.

In addition to addressing how people respond cognitively to expectancy-violating situations, we expanded on previous affection research by also examining behavioral responses. The predictions received little support. Because naive participants in both treatment conditions were expected to increase immediacy, expressiveness, and positive affect, we examined main effects for time rather than the Behavior × Time interaction. Counter to the hypothesis, naive participants did not significantly change their immediacy or their expressiveness from the premanipulation to postmanipulation conversations and actually decreased their positive affect. EVT posits that, when interacting with a rewarding other, one will reciprocate increases in involvement and compensate for decreases in involvement, to maintain access to the rewards of the other. Therefore, given that the relationships in the study were highly rewarding (with a mean rewardingness score of over 6 on a 7-point scale), these findings are somewhat puzzling and we can only speculate as to their meaning.

We suspect that the failure to identify changes in immediacy or expressiveness may be partially attributable to the fact that naive participants' behaviors were coded only once during each conversation. As such, they represent the aggregate levels of immediacy, expressiveness, and positive affect observed at each time period. Were the behaviors to be coded at multiple points in time, we may have been able to identify more subtle differences in these nonverbal dimensions (see Burgoon, Stern, & Dillman, 1995). Power for the immediacy and expressiveness comparisons was low (.16 and .05, respectively), further precluding the possibility of finding significant effects. The overall decrease in positive affect may also
partially have been a function of participant fatigue, given that the experimental procedure often required nearly 2 hours of participants' time when travel to and from the laboratory site was factored in. The demands of the procedure may have been enough to override the effects of the manipulated change in confederates' affection level and to produce decreased positive affect overall.

It also may be the case that the magnitudes of confederates' behavioral changes, although they produced changes in participants' perceptions, were simply not sufficiently violative to induce behavioral reciprocity or compensation (see Andersen, Guerrero, Buller, & Jorgensen, 1998). That is, although participants' cognitive arousal may have been heightened by the violations, the violations may not have produced enough arousal to elicit changes in participants' own behaviors. Certainly, these comparisons should be replicated before further conclusions are drawn.

H4 predicted that naive participants in the high affection condition should increase their nonverbal synchrony with the confederate as a way of reciprocating his or her increases in affection, whereas naive participants in the low condition would decrease synchrony so as not to reciprocate the confederates' increased affection. Only the second of these predictions emerged, with naive participants in the low condition becoming significantly less synchronous with confederates over time. Naive participants in the high condition did not change their level of synchrony. These findings mirror those identified by Guerrero and Burgoon (1996), who reported that naive recipients of decreased involvement became less behaviorally synchronous with a confederate in response.

From previous studies, we were aware of the potential for gender and gender composition to influence affectionate behaviors. However, gender did not exert a main effect on any of the variables except for naive participants' perceptions of confederates' immediacy, and then the main effect was overridden by the interaction with gender composition. Rather, differences lay in the interaction between gender and gender composition, which produced four cells (male–male, male–female, female–male, female–female). As anticipated, men and women showed little difference in affection behaviors when interacting in opposite-gender dyads. This is consistent with findings reported by Shuntich and Shapiro (1991) and Floyd and Morman (1997), who have suggested an adaptation effect in cross-gender interaction that encourages each gender to adapt to the communicative styles of the other. By contrast, substantial gender differences were found in all behaviors for those interacting in same-gender pairs. As expected, female–female pairs exceeded male–male dyads in perceived immediacy, coded immediacy, expressiveness, and positive affect. These differences reflect prototypical gender discriminations; that they emerged here only in same-gender dyads suggests that such discriminations are intensified in same-gender interaction (see Rose, 1985).
Given that such prototypical gender differences are often pronounced, we reasoned that gender or gender composition might moderate cognitive and behavioral responses to expectancy-violating situations. RQ1 and RQ2 addressed this possibility; however, no significant moderating effects emerged for either gender or the Gender x Gender composition interaction. These results tell us that, at least with affectionate involvement, expectancy-violating behaviors in platonic friendships produce largely the same cognitive and behavioral outcomes for women and men and for same- and opposite-gender dyads.

**SUMMARY AND CONCLUSIONS**

Given its simultaneous benefits and risks, affectionate communication can have a number of important implications for relational development and maintenance. Sincere expressions of affection, delivered in an appropriate manner at an appropriate point in the developmental trajectory, can increase positive regard for the communicator and significantly enhance the quality of the relationship. Affectionate expressions that come as negative surprises, however, may be severely detrimental to the relationship by causing discomfort for the recipient and placing him or her in an attributional crisis. As a result, the normally positive expression “I love you” ultimately may damage rather than enhance the relationship. Because it has such significant potential to affect relationships both positively and negatively, affectionate communication is an ideal topic for the study of expectancy violations and their outcomes.

Considered in concert, our results not only provide additional support for the tenets of EVT, but also suggest some interesting avenues for future research. As noted previously, the same affectionate behaviors may not elicit the same expectancy violations in all relationship types. Rather, certain relational partners may enter interactions with varying bandwidths for appropriate and expected behavior. It is intuitive, for example, that romantic partners will expect a wider range of affectionate behaviors from each other than will platonic friends; however, a wider bandwidth may also be present if the relationship is familial, or if a less restricted bandwidth has been negotiated over time within the relationship. In addition, power differences in the relationship may cause differential ranges of appropriate behavior; those in higher-power positions may have a larger range of acceptable behaviors than those of lesser power. These differences, and their effects on how violative acts are judged, should be addressed in future research on varying relational types and contexts.

Future studies also may address different modalities for communicating affection. For example, affectionate expressions may be judged
differently if they are communicated verbally or nonverbally. Moreover, the number of cues present in the interaction also may play a role; individuals may respond differently to expressions of affection made during a face-to-face interaction than they would to written expressions or those transmitted through reduced-cues modalities, such as the telephone or e-mail. The increasing use of such modalities for relational development and maintenance purposes should invite research on these possibilities (see Parks & Floyd, 1996).

Some limitations of our study may constrain the applicability of these results. Although some would suggest that college-aged students may be ideal for the study of friendship, given the heightened importance many people place on friends at that stage in life (e.g., Berscheid, Snyder, & Omoto, 1989), examining samples of different age groups may indicate whether age plays a role in how interpersonal expectancy violations are assessed and addressed. Although we identified a number of significant effects, our statistical power was constricted due to a relatively small sample size. Future studies employing a larger sample may be able to ascertain additional effects that did not emerge in this study. Finally, although we chose deliberately to restrict our sample to platonic friendships, this may limit the generalizability of the findings to those or similar relationships. As noted previously, comparisons using different relationship types may illustrate differential reactions to expectancy violations due to varying characteristics of those relationships.

NOTES

1. We use the terms "affectionate communication," "affectionate behavior," "affectionate expression," and "affectionate interaction" synonymously, unless otherwise noted.

2. Interpretations of this finding may be contingent on an assumption of heterosexuality. Some researchers, such as Derlega, Lewis, Harrison, Winstead, and Costanza (1989), have suggested that behaviors such as touch are more likely to be interpreted as sexual in nature when they occur between men than between women or in opposite-gender pairs. Thus, to avoid appearing homosexual, men generally refrain from touching each other in all but ritualistic ways (e.g., shaking hands). Of course, one would not theoretically expect such an effect to emerge in homosexual pairs, making participants' sexual orientation a potentially important moderator variable. Theoretic and empirical elaboration of Derlega et al.'s position is provided in Floyd (1998).

3. All but one pair of participants were self-identified as heterosexual.

4. In the case of same-gender pairs, a coin toss determined assignment to the roles of confederate and participant.

5. Questions were: "What is something you really like about your relationship?" "How would you describe what your relationship with each other is like to someone else?" "When do you feel closest to each other?" and "Discuss one of your earliest memories of each other."

6. We were careful to use words such as "closeness," "liking," "involvement," and "appreciation" in addition to "affection" when explaining the desired manipulation. Because "affection" carries romantic connotations and these were nonromantic relationships, we
wanted to assure confederates that we were not asking them to behave romantically toward their partners.

7. Sample items included: "I feel free to talk to this person about anything," "I like this person," and "I can use this person's things without asking permission."

8. Rewardingness items included: "He or she is a rewarding person to interact with," "I don't really enjoy my relationship with this person" (reversed), "Most people would probably like having a conversation with him or her," "I generally look forward to the time we spend together," and "I don't care about this person very much" (reversed).

9. Affection scale items were: "I tried to do things that he or she would like," "I ignored my partner's feelings and showed that I didn't like him or her" (reversed), "I showed trust in my partner," and "I tried to let my partner know that I can't stand him or her" (reversed).

10. Expectedness items included: "My partner behaved in an unusual way" (reversed), "My partner engaged in normal conversational behavior," "My partner behaved the way you would expect most people to behave," and "My partner acted in an appropriate manner during our conversation." Evaluation items included: "My partner acted like someone that most people would like to interact with," "My partner behaved in a way that was pleasing to me," "My partner behaved in an undesirable fashion" (reversed), and "My partner made the interaction enjoyable for me."

11. Competence items were: Believable-Unbelievable, Competent-Incompetent, Informed-Uninformed, Logical-Illogical, Qualified-Unqualified, and Intelligent-Unintelligent. Character items were: Honest-Dishonest, Cooperative-Uncooperative, Kind-Cruel, Responsible-Irresponsible, Nice-Awful, and Good-Bad.

12. Social attraction items included: "It would be difficult to meet and talk with my partner" (reversed), "We could never establish a very personal relationship with each other" (reversed), "I would like to have a friendly chat with him/her," and "I think this person could be a good friend of mine." Task attraction items included: "I couldn't get anything accomplished with my partner" (reversed), "If I wanted to get things done, I could probably depend on him/her," "I have confidence in this person's ability to get a job done," and "I think he/she would be a poor problem solver" (reversed).

13. Principal components factor analyses were used to verify the unidimensionality of each scale. The criterion was that items must have primary loadings of .50 or higher and secondary loadings of .30 or lower. In all cases, the items corresponding to each scale had sufficient loadings on a single factor to indicate unidimensionality.

14. Examples of the bipolar adjectives used in the nonverbal coding were: direct body orientation-indirect body orientation; sat close-sat far; touched other frequently-did not touch other; very expressive facially-very inexpressive facially; matched partner's gestures-did not match partner's gestures.

15. Coefficient alphas represent naive participants' scores. Confederates' behavior was coded only on involvement ($\alpha = .81$) and expressiveness ($\alpha = .85$) to check the manipulation.

16. Coding of the second conversation included the portion of interaction that was videotaped without participants' knowledge.

17. Specifically, confederates in the high affection condition increased their conversational involvement and engagement, became more immediate, touched their partner (on the shoulder or forearm) more, sat closer, oriented their posture more directly toward their partner, leaned toward their partner more, became more animated and more vocally and facially expressive, and used more gestures. Confederates in the low affection condition decreased these same behaviors. Few, if any, confederates in the high affection condition made verbal expressions of affection and none engaged in unequivocally romantic behaviors (e.g., kissing their partners).

18. Mauchly tests of sphericity indicated that compound symmetry assumptions were satisfied in each of the MANOVAs.
19. Bartlett-Box $F$ tests indicated heteroscedasticity in Time 2 measures of receptivity and character. In such cases, Keppel (1991) recommended adjusting the alpha level to compensate for an increased Type I error rate. Both comparisons would remain significant at a more conservative alpha level of .025, although the receptivity comparison would remain significant even with an alpha of .01.

20. Simple effect comparisons by manipulation at Time 1 produced nonsignificant group differences on all eight variables.

21. Also informative on this issue is research on attributions, which has indicated that negative behavior is more likely to induce attribution-making on the part of the recipient than is positive behavior (see, e.g., Manusov, Floyd, & Kerssen-Griep, 1997). Such an effect may have made negative violations more salient for participants than positive violations and elicited a more pronounced cognitive response.

REFERENCES


Floyd, K. (in press). Close friends' perceptions of the importance of self disclosure and positive affect. Psychological Reports.


