

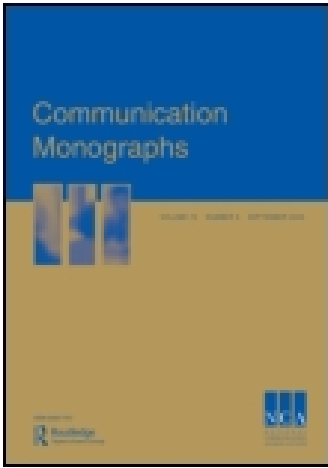
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Kory Floyd ^a & Judee K. Burgoon ^b

^a Assistant Professor of Communication , Cleveland State University , 2001 Euclid Avenue, (216) 687-4511, Cleveland, OH, 44115 E-mail:

^b Professor of Communication , University of Arizona

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Reacting to Nonverbal Expressions of Liking: A Test of Interaction Adaptation Theory

Kory Floyd and Judee K. Burgoon

*An intuitive notion regarding expressions of liking is that they are consistently associated with positive relational outcomes. However, when such expressions go unreciprocated, they can leave the sender in a face-compromising position and may end up damaging the relationship. The current experiment applied interaction adaptation theory to the task of predicting when nonverbal expressions of liking will be reciprocated. Ninety-six adults were paired with same-sex strangers and induced to expect the strangers either to like or dislike them and to desire that the strangers either like or dislike them. The strangers, who were trained confederates, enacted nonverbal behaviors associated either with liking or disliking during a short experimental interaction with participants. Participants enacted nonverbal liking behavior when they desired the same from confederates, largely irrespective of participants' expectations or confederates' actual behaviors. Conversely, participants enacted disliking behavior when they desired the same from confederates. These results provide support for interaction adaptation theory and also suggest the counterintuitive notion that expressions of liking may not always be considered positive events. The results also raise important issues for how behavior valence and expectations are conceptually and operationally defined. **Key words:** Affection, Nonverbal Behavior, Adaptation*

Few would dispute the importance of expressing liking in close relationships. Such expressions can serve as critical incidents by which relational development is gauged; for example, romantic partners often remember the first hug, the first kiss, or the first time the words "I love you" were spoken (see Owen, 1987). Expressing liking or affection is important for nonromantic relationships, as well, because it can cause relational partners to feel valued (Floyd, 1997a, b, c) and can reduce uncertainty about the state of the relationship.

Despite the intuitive notion that expressions of liking or affection are consistently associated with positive relational outcomes, some recent studies have begun to address the risks of such expressions (e.g., Floyd & Voloudakis, 1999a). For instance, the sentiment "I really like you" might be intended to express platonic affection but might be misinterpreted by the receiver as a romantic sentiment, causing relational boundary ambiguity (see Morman & Floyd, 1998b). In the current investigation, we address another critical issue in expressing liking: whether or not the expression is reciprocated. If an expression of liking goes unreciprocated, for example, it can leave the sender in a face-compromising position (see Shimanoff, 1985) and end up damaging the relationship rather than enhancing it.

While liking is often expressed verbally (Booth-Butterfield & Trotta, 1994; Owen, 1987), we focus in the present study on the nonverbal expression of liking. In some ways, the nonverbal behaviors used to express liking can be more provocative than the verbal. For one, they may be enacted with less conscious control than verbal behaviors and may therefore be presumed to reflect more accurately the emotional status of the communicator (Burgoon, 1994, pp. 235–236). They may also entail less

Kory Floyd is Assistant Professor of Communication at Cleveland State University. Judee Burgoon is Professor of Communication at the University of Arizona. The authors acknowledge the assistance of Michael Konrad, Carina Lovitt, Shelby Stewart, and Ralph Valencia in conducting this study, which is based on the first author's dissertation as directed by the second author. Address correspondence to the first author at Department of Communication, Cleveland State University, 2001 Euclid Avenue, Cleveland OH 44115. (216) 687-4511. E-mail: k.floyd@csuohio.edu

risk for the communicator than verbal expressions of liking because their intended meanings may be easier to deny if the sentiment is not reciprocated. Below, we review research on the most common nonverbal indicators of liking. We then explicate the tenets of interaction adaptation theory, which we apply to the task of predicting when nonverbal expressions of liking are likely to be reciprocated.

Nonverbal Indicators of Liking

Studies that have focused on the encoding and decoding of nonverbal behaviors have consistently identified a small number of nonverbal cues for liking, affection, or intimacy. For example, *smiling* has been associated with affiliation and intimacy (Burgoon, Buller, Hale, & deTurck 1984), liking (Palmer, Cappella, Patterson, & Churchill, 1990; Palmer & Simmons, 1995), and attempts to gain approval (Rosenfeld, 1966a, b). Likewise, *gaze* is associated with liking and affiliation. Individuals exhibit more gaze with friends and liked others than they do with strangers and disliked others (Exline & Winters, 1965; Mehrabian, 1968, 1969; Russo, 1975) and gaze likewise produces increases in perceived intimacy (Burgoon et al., 1984), closeness (Kleck & Nuessle, 1968), immediacy (Burgoon, 1991), and liking (Palmer & Simmons, 1995). *Touch* has also been associated with relational affiliation and affection (see Floyd, in press). People touch and expect to be touched more in close relationships (Burgoon, Walther, & Baesler, 1992; Henley, 1977), and touch elicits more liking from receivers than does the lack of touch (Boderman, Freed, & Kinnucan, 1972).

Two similar nonverbal cues that are also consistently associated with perceptions of liking and affiliation are *proximity* and *forward lean*. Individuals are more proximal with friends and liked others than with strangers and disliked others (Sundstrom & Altman, 1976), and use proximity as a means of communicating affection (Floyd & Morman, 1999). Similarly, forward lean is associated with messages of rapport (Trout & Rosenfeld, 1980), intimacy (Burgoon, 1991), and liking (Palmer et al., 1990; Palmer & Simmons, 1995). Finally, *behavioral congruence* has been linked with perceptions of intimacy and rapport in a number of empirical investigations. For example, Bernieri (1988) found that behavioral synchrony was positively related to feelings of rapport within dyads (see also Floyd, 1999; LaFrance, 1979; LaFrance & Broadbent, 1976).

While many of these studies have focused on single behaviors as cues for liking, other studies have examined the effects of multiple-cue combinations on the encoding and decoding of touch. Palmer and Simmons (1995) reported that when people were asked to communicate liking to strangers, they increased gaze, smiling, and forward lean. Moreover, increases in gaze and smiling were associated with actual increases in liking on the part of the receiver. Other studies have examined the behavior combinations that are typically *decoded* as messages of liking. For instance, Burgoon and LePoire (1999) found the particular cue combinations affected perceptions of intimacy. Specifically, they found that conversational partners interpreted high gaze and smiling, vocal relaxation, and the use of few object adaptors as communicating messages of intimacy, while observers interpreted high gaze, vocal resonance, vocal relaxation, and the use of self adaptors as indicative of intimacy.

When individuals are the recipients of expressions of liking, a number of variables may influence how they respond behaviorally. One theory that specifically ad-

addresses the predictors of people's responses to others' behaviors is interaction adaptation theory. Below, we describe the tenets of interaction adaptation theory and apply it to the task of predicting strangers' responses to nonverbal expressions of liking.

Interaction Adaptation Theory

Among the assumptions of IAT (Burgoon, Stern, & Dillman, 1995) is that individuals can enact both matched or complementary behavioral responses to others' behaviors. Biologically and socially, the pressures are largely toward synchrony and reciprocity; for example, politeness norms can cause people to reciprocate gestures of interest (e.g., saying "it's nice to meet you") even if the sentiment is not shared. Likewise, individuals may feel compelled to respond in kind to favors from others, a phenomenon Gouldner (1960) attributed to a "norm of reciprocity."

Despite these pressures, however, IAT recognizes that individuals can also adopt complementary patterns of behavior and may do so either strategically (e.g., to send a particular relational message to another) or without a high degree of intention or awareness (e.g., withdrawing from a hostile other to ensure safety). IAT can therefore be applied to the task of predicting whether receivers are more likely to match senders' behaviors or respond to them with complementary behaviors. IAT proposes that individuals enter interactions with requirements, expectations, and desires for the behaviors present in the interaction. *Requirements* (R) refer to what a person believes is necessary at a given point in the interaction. R is most often driven by biological needs; for instance, one might require physical proximity if hearing impaired. *Expectations* (E) refer to what is anticipated in the interaction. These can be based on social norms or prescriptions, generic communication functions, on past experience with one's partner, and/or on individual knowledge or information about the partner and his or her behavior. Finally, *desires* (D) are one's personal goals and preferences for the interaction. These can be based on temperament (e.g., a passive person might desire to interact with a more dominant other) but may also be influenced by social and cultural norms (e.g., Asians may desire more self-deprecating behavior from others than may Caucasians). R, E, and D are not orthogonal to each other, in that each can influence the others.

According to the theory, these variables combine to form an *interaction position* (IP). This represents a net assessment of the behavioral patterns that are needed, anticipated, and preferred in an interaction. The IP is then compared to A, the *actual behavior* performed by a conversation partner. Adaptive responses to partners' behaviors are predicted based on (a) the magnitude of discrepancy between IP and A, and (b) the valence associated with each. When a receiver's IP matches a sender's A, the theory predicts that the receiver will match or reciprocate the sender's behaviors. Small discrepancies may be overlooked or may simply be tolerated. Large discrepancies between IP and A, however, should invite assessments of their relative valences. It may be the case that a partner's behavior is more positive than what was required, expected, or desired; conversely, the behavior may be more negatively valenced than the interaction position.

According to IAT, receivers' response patterns should move in the direction of whichever is more positively valenced, at least initially. Therefore, when the actual behavior is more positive than IP, receivers should match or reciprocate senders' behaviors. When IP is more positive than the actual behavior, however, receivers

should react to senders' behaviors with complementary behaviors (which usually takes the form of engaging in behaviors opposite those of the sender but may take the form of resisting adaptation and maintaining one's earlier behaviors).

When R, E, and D are congruent with each other, the predicted adaptation pattern is the same regardless of whether requirements, expectations, or desires are examined. However, it is possible for R, E, and D to be incongruent. For example, one might desire close proximity to a celebrity but may expect to be kept at a distance for security reasons. These types of situations raise the question as to how requirements, expectations, and desires are weighted in determining the interaction position, an issue on which IAT is not entirely clear. The theory does posit that it is often more important to satisfy requirements than desires or expectations, thus rendering R the most influential element. However, if requirements are satisfied, as they often are in routine interaction, then they may not be salient, causing the other elements to exert stronger influence. How expectations and desires combine to form the IP when they are incongruent is an important empirical question that we address in the present study.

Several investigations have provided support for IAT's predictions. In an analysis of interaction within same- and mixed-culture dyads, Burgoon, Ebesu, White, Koch, Alvaro, and Kikuchi (1998) found that first encounters in both types of dyads were characterized by behavioral reciprocity and that reciprocity was evident over time, with participants who interacted with responsive others increasing their involvement and those who interacted with unresponsive others decreasing their involvement over time. Burgoon, Allsop, and Miczo (1997) offered further analysis of the Burgoon et al. (1998) study, reporting that individuals who expected pleasantness in their interactions, and individuals who were concerned with cordiality, showed greater behavioral adaptation to their partners. In addition, those in same-culture dyads exhibited greater behavioral involvement to the extent that they expected to be more involved and more dominant.

Finally, Guerrero and Burgoon (1996) examined the association between interaction adaptation and attachment styles. They elicited participants who fit one of four attachment styles: Preoccupieds, Dismissive Avoidants, Fearful Avoidants, and Secures. Participants' romantic partners were induced either to greatly increase or greatly decrease their involvement during an experimental interaction with participants. Consistent with IAT, Guerrero and Burgoon found that reciprocity was the dominant pattern of adaptation (see also White & Burgoon, 1997). Moreover, they found that Preoccupieds, who by nature of their attachment style began interactions with an IP that is high on involvement, showed the greatest reciprocity of increased involvement but also demonstrated the greatest compensation of decreased involvement because decreased involvement is substantially more negatively valenced for Preoccupieds than is their own IP.

In sum, these tests indicate strong preliminary support for the tenets of IAT. All of these investigations involved RED elements that were measured rather than manipulated, however, making it difficult to know whether REDs' influences on behavior are causal or purely correlational. In the present study, we manipulated preinteraction expectations and desires to provide a more direct test of IAT's causal claims within the realm of nonverbal expressions of liking.

TABLE 1

PREDICTIONS REGARDING BEHAVIORAL RESPONSES TO NONVERBAL LIKING AND DISLIKING BEHAVIOR

Cell	Desire	Expect	IP	Confederate Behavior	Behavior Valence	Match/ Complement
1	L	L	L	L	Positive	Match
2	D	D	D	D	Positive	Match
3	L	L	L	D	Negative	Complement
4	D	D	D	L	Negative	Complement
5	L	D	?	L	?	?
6	D	L	?	D	?	?
7	L	D	?	D	?	?
8	D	L	?	L	?	?

Note: L = liking, D = disliking, IP = interaction position.

Hypotheses

IAT posits that an individual responds to another's behavior based on the discrepancy between the behavior and the individual's interaction position. We opted in this study to manipulate, rather than simply measure, expectations and desires for liking and disliking. These are crossed with actual liking and disliking behavior to produce an eight-cell factorial design that is depicted in Table 1. We then applied IAT to the task of predicting behavioral responses in each of these cells.

IAT predicts that when desire, expectation, and actual behavior are all the same, receivers will match senders' behaviors. These conditions appear as cells 1 and 2 in Table 1, in which D, E, and A are all congruent with each other. Stated as the first hypothesis:

H₁: Receivers match senders' behaviors when receivers (a) desire, expect, and receive liking behavior; and (b) desire, expect, and receive disliking behavior.

Cells 3 and 4 represent conditions in which the IP is incongruent with A. In such instances, IAT predicts that receivers' responses will be in the direction of whichever is more positively valenced, IP or A. This, of course, raises the question as to what determines the valence of a behavior. There are at least three ways to address this question. First, as expectancy violations theory (Burgoon & Hale, 1988; Burgoon & Jones, 1976) suggests, the valence of a behavior may derive partially from characteristics of the sender. This may be particularly true for behaviors whose meaning is ambiguous. For instance, proximity can be valenced positively when enacted by senders who are especially attractive, credible, powerful, familiar, or well liked, yet the same behavior can be valenced negatively when enacted by senders who do not possess such qualities. The effect of reward characteristics on the valence of senders' behaviors has been demonstrated in a number of studies in which such characteristics were manipulated (Burgoon, Newton, Walther, & Baesler, 1989; Burgoon, Manusov, Mineo, & Hale, 1985; Burgoon & Walther, 1990).

A second possibility is that particular behaviors have an inherently positive or negative valence. This may be particularly true for behaviors whose meaning is less ambiguous. For instance, an intense punch to the stomach should, with few exceptions, be negatively valenced by the receiver and by observers, regardless of who the sender is. By comparison, one might expect that behaviors associated with the expression of liking should almost always be positively valenced by receivers,

given that the need to be liked, valued, and appreciated by others is among the most fundamental human needs (Maslow, 1970).

Finally, valence can be conceptualized as stemming from the congruence between what was desired and what was enacted. Put simply, behaviors that were desired are positively valenced and behaviors that were undesired are negatively valenced. Within the language of IAT, then, desire plays a role not only in determining the interaction position in the first place, but in valencing behavioral discrepancies from it; as Burgoon, Stern et al. (1995) noted, "The valences attached to the IP and A should derive from the same R, E, and D elements governing the IP" (p. 269). According to this perspective, even behaviors that one might consider inherently positive would be negatively valenced if they were undesired for some reason.

The latter two of these possibilities are particularly relevant to the present investigation. This study involves the communication of liking, a behavior that should inherently carry a strong positive valence due to individuals' needs for validation, belongingness, and affection (Brown & Levinson, 1987; Maslow, 1970; Schutz, 1966). This should be particularly true in initial interaction between strangers, for which politeness norms dictate a pleasant, positive tone (Burgoon, 1994). We posit, however, that the effects of these global, normative expectations and desires will pale in comparison to individuals' interaction-specific expectations and desires. That is, although receivers may desire and expect pleasant behavior *generally*, they will assign valence to a behavior based on whether it matches what they desire in that particular interaction, irrespective of any inherent valence the behavior may have. In such a case, a behavior such as an expression of liking would be unwelcomed if, for some reason, the receiver did not wish to be liked. Such a situation is conceivable, given that receiving expressions of liking or affection can place receivers under unwanted obligations, including the obligation to respond in kind and to attend to the relational implications of the expression (Floyd & Voloudakis, 1999b).

If this is the case, then in situations when IP and A conflict, the IP should always be more positively valenced than the A, since A would conflict with the desire element of the IP. Therefore, receivers of liking or disliking behavior would react with complementary behavior. Thus, we hypothesize:

H₂: Receivers react with complementarity to senders' behaviors when receivers (a) desire and expect to be liked but receive disliking behavior; and (b) desire and expect to be disliked but receive liking behavior.

Cells 5 through 8 on Table 1 represent situations in which expectancies and desires conflict. This is problematic for predicting behavioral responses because IAT's predictions are driven by the congruence and relative valence of IP and A. Both expectancies and desires must be factored in when determining the IP; however, the theory is not specific as to the conditions under which E or D will take precedence in determining the IP (see Burgoon & White, 1997). Expectancy models such as expectancy violations theory (Burgoon & Hale, 1988) would tend to give preference to the role of E, particularly in initial interactions between strangers when uncertainty about one's partner is high. In these instances, people may rely heavily on socio-cultural expectancies to guide their own behavior and also to suggest what they should expect from each other. In contrast, strategic communication models (see Burgoon, Le Poire, & Rosenthal, 1995; Ickes, Patterson, Rajcecki, & Tanford, 1982) might predict that D would be more salient, at least in cases when it conflicts

with E. That is, when people desire behavior from others that they do not expect to receive, strategic communication models predict that their behaviors will model their own desires in order to elicit those behaviors from others via the norm of reciprocity.

Depending on the relative weight of E and D, several outcomes are possible. If desires are the most potent, then one should expect matching in cells 5 and 6 and complementarity in cells 7 and 8. The opposite pattern should obtain if expectancies exert the greater influence. However, it may also be the case that E and D are of equal or nearly equal importance in determining the IP. In this case, their incongruence may prevent receivers from clearly defining an IP for senders. This uncertainty about senders' IP may produce alternating matching and complementarity within interactions or it may produce nonadaptation.

Given that IAT does not unequivocally specify the relative potency of E and D, we are unable to make clear predictions about the behavioral responses expected in cells 5 through 8. Therefore, we address this issue in the form of a research question:

RQ: When expectancies and desires are incongruent, what patterns of adaptation, if any, do receivers exhibit in response to senders' behaviors?

Method

Participants and Confederates

Participants ($N = 96$) were adults recruited from undergraduate communication courses for "a study of how we form first impressions of people." There were 48 men and 48 women who ranged in age from 18 to 34 years ($M = 21.07$ years, $SD = 2.81$). Each was paired with a trained confederate of his or her same sex.¹ Participants earned extra course credit in exchange for their involvement.

Confederates were two male and two female undergraduates who were selected for their ability to perform the behavior manipulation in a natural, believable manner while conversing with strangers. The confederates were all between the ages of 20 and 23, ages similar to those of the modal participant. Confederates received extensive individual and group training on the conduct of their manipulations, practicing with the researcher and with each other in the laboratory setting and reviewing videotapes of other experiments employing similar procedures. Specifically, they were instructed on the behaviors to modify when enacting the high and low liking manipulations and were trained in keeping their verbal responses during the experimental conversations consistent across conversations and amongst themselves.

Procedure

Data collection took place in a converted apartment suite equipped with one-way windows for unobtrusive observation and videotaping. Participants (Ps) signed up for one-hour sessions at the laboratory. During each session, a participant and one of the confederates (Cs) arrived at the facility at approximately the same time, to give the impression that the confederate was simply another student who had also signed up for that time slot. Both were initially seated in the waiting area and were told that the purpose of the study was to "look at how we interact with others when we meet them for the first time, and how we form first impressions of people."

The researcher then informed P and C that, as a way of examining how they

interacted and formed impressions of each other, they would be engaging in a short “get to know each other” exercise that would be video- and audio-taped from behind a one-way window. Following these instructions, P and C completed consent forms that described the procedures, elicited their agreement to be videotaped, and informed them of their right to withdraw from the study at any time. No participants withdrew. P and C were then told that for the researcher’s ease in moving them from place to place during the session, he would be randomly assigning them to the roles of “Person A” and “Person B.” The researcher flipped a coin to assign the roles, but the coin toss was fixed so that the participant was always assigned to the role of “Person B.” P and C were then separated; Ps completed demographic and manipulation check measures and were then given the desire induction, while Cs were taken to a separate room where they waited until P had completed the preinteraction measures.

Following completion of these measures and inductions, P and C were reunited in the living room portion of the facility, were seated in swivel chairs, and attached lavalier microphones to their shirts. They were given a list of five questions taken from a game designed to promote dyadic interaction and asked to discuss their opinions and responses to each topic.² The topics were presented in a cyclical, counterbalanced order. After completing the fifth topic, P and C were again separated; P completed postinteraction measures and was debriefed.

Manipulations

Behavior manipulation. During their interactions with Ps, Cs behaved either as though they liked Ps or as though they disliked Ps. Cs in the “high liking” condition were instructed to smile a great deal, to maintain moderate but consistent gaze with Ps, to touch Ps during the interaction, to sit close to Ps, to lean forward toward Ps during the conversation, and to match Ps’ posture. Cs in the “low liking” condition were given the opposite instructions: to avoid smiling, eye contact, and touch, to sit far away from Ps, to lean away from Ps, and to avoid matching Ps’ posture. Cs were instructed to begin the manipulation at the start of the interaction and to maintain it throughout.

Desire manipulation. Because the need to be liked, valued, and appreciated by others is among the most fundamental human needs (Maslow, 1970), it was imperative to create a context in which participants assigned to the “low desired liking” condition would be adequately motivated to desire that their partner not like them. To achieve such a motivation, the desire manipulation was linked to the preservation of negative face needs, or the desire to be unencumbered (Brown & Levinson, 1987, p. 62).

Ps, who were randomly assigned to conditions, were told that their interaction with Cs would be observed by a doctoral student who was seeking pairs of people to participate in a separate, unrelated study. They were given the following information (the phrasing was changed slightly depending on condition, as indicated in brackets):

Before we begin, I need to let you know that a doctoral student will be observing your interaction with your partner from behind the one-way window. He is recruiting participants for a larger study, which is separate from the one we’re doing now. Specifically, he’s looking for pairs of people who seem to really like [not like] each other after they first meet, so if it seems that you and your

partner like [do not like] each other as a result of this interaction you're about to have, then we will be approaching you both about participating in his study. I should probably let you know that this other study would involve you and your partner making several trips over here to the lab within the next few months.

Although unlikely, it is possible that some Ps may have wanted to participate in the study described, which would have created a motivation opposite what was intended. To guard against this possibility, Ps were told immediately before they began their interaction that they could sign up for the other study right then if they wanted. Had any done so, their participation would have been terminated at that point; however, all declined. During debriefing, Ps were informed that no additional study existed. The desire manipulation was pilot tested prior to the start of the experiment.

Expectancy manipulation. To induce Ps to expect that Cs would or would not like them, Cs enacted either a likable or dislikable behavioral pattern during the initial phase of each experimental session. In the "high expected liking" condition, Cs were friendly to Ps when they were sitting in the waiting area before each session: they smiled, introduced themselves, initiated small talk, and sat so that they were directly facing Ps while the researcher was presenting information and initial instructions about the study. In the "low expected liking" condition, Cs did not initiate small talk, did not smile, did not look at Ps, and sat so that they were not facing Ps at all. Cs began their assigned manipulation as soon as both C and P were seated in the waiting area and maintained the manipulation until P and C were separated to completed preinteraction measures.

Coding of Nonverbal Behavior

Six trained coders, working in pairs, coded Ps' and Cs' nonverbal behaviors in each interaction from the videotapes. To address the experimental hypotheses, coders coded Ps' liking behavior, including smiling, gaze, forward lean, touch, postural matching, and proximity ($\alpha = .86$). These behaviors were selected because, as noted above, they are consistently associated with assessments of liking and affection, and because they allow for testing of the theory's predictions with actual behavior rather than gestalt-type perceptions of behavior (e.g., acting more likeable). The behaviors were coded on seven-point scales, with higher scores indicating greater amounts or frequencies of the behaviors. They were each coded at eight points in the conversation, during the first and second thirty seconds of each of the first four questions. The fifth question was not coded; since participants were aware that this was the final topic of their conversation, they may have inadvertently altered their behaviors to "prepare" for the conclusion of the interaction (see White & Burgoon, 1997).

Coders were advanced undergraduates who had completed coursework in nonverbal communication and who either were paid or received independent study credit in exchange for their work. They received approximately six hours of individual and collective training, which consisted of reviewing the definitions of each nonverbal behavior and conducting practice coding from videotapes. Coders were blind to the experimental hypotheses and manipulations. Intercoder reliability, based on Ebel's intraclass correlation (Guilford, 1954), was .94.

Manipulation Checks

Preinteraction familiarity. To ensure that Ps and Cs were strangers prior to the interaction, Ps completed a measure of prefamiliarity consisting of two questions used by Palmer and Simmons (1995). The first question asked, "how well would you say that you and your partner know each other?" with responses on a seven-point scale anchored at 1 with "not at all" and at 7 with "very well." The second question, which asked, "how would you describe your relationship with this person?" had the following response options: stranger, acquaintance, frequent acquaintance, friend, close friend.

Expectancy manipulation. To check the expectancy manipulation, Ps were given a multiple-item measure, created for this study, asking them to indicate "what you think the upcoming conversation will be like." They were told that they should draw on their first impressions of their partner to help them formulate their answers. The response format was a seven-point scale anchored at 1 with "I do not expect this at all" and at 7 with "I strongly expect this." Interspersed among these items were the four expectancy manipulation items, whose scores were aggregated to form a composite expectancy score.³ In addition, Ps in two offset control groups ($n = 24$) who received neither the desire nor the expectancy manipulation interacted with Cs in both the high and low liking conditions. Their responses to the expectation manipulation measure served as a baseline against which expectations of the experimental participants were compared.

Behavior manipulation. The behavior manipulation was checked using coders' assessments of Cs' liking behavior in each condition. Also, Ps reported how much they thought Cs' liked them in the two behavioral conditions, using the aggregate of three Likert-scale items developed for this study.⁴

Desire manipulation. The desire manipulation was tested in a pilot investigation rather than during the experiment itself, out of concern that this might sensitize Ps to the manipulation and cause reactant behavior. Pilot study participants were 12 men and 12 women who were each paired with a same-sex confederate whom they did not know. They ranged in age from 19 to 25 years ($M = 21.71$ years, $SD = 1.60$). Procedures in the pilot study were identical to those in the larger experiment, with two exceptions. First, participants' involvement was terminated after the inductions and preinteraction measures, at the point at which they would have begun their interaction with the confederate. At that point, participants were informed that they were part of the pilot investigation and were debriefed and excused. Second, a direct measure of the desire manipulation was taken. The measure, created for this study, asked participants to indicate what they thought would be important to them in the upcoming conversation. The aggregate of three items, each measured with seven-point bipolar adjective scales, was used to ascertain the success of the desire manipulation.^{5,6}

Results

Manipulation Checks

Preinteraction familiarity. Ps' mean preinteraction familiarity score was 1.05 ($SD = 0.41$), indicating that Ps did not know Cs at all before the experiment.

Moreover, 98.3% of Ps indicated that they viewed C as a stranger, with the remaining indicating that C was an acquaintance.

Expectancy manipulation. Ps in the liking-expectancy, disliking-expectancy, and control groups differed significantly from each other on the extent to which they expected Cs to like them, $F(2, 114) = 22.62, p < .001, \eta^2 = .29$. Follow-up analysis with the Dunnett test revealed that those in the liking-expectancy condition expected Cs to like them ($M = 5.27, SD = 0.58$) significantly more than did those in the control group ($M = 4.68, SD = 0.35$), who expected Cs to like them significantly more than did those in the disliking-expectancy condition ($M = 4.36, SD = 0.82$).

Behavior manipulation. Ps indicated the extent to which they felt Cs liked them after the interaction. Ps in the high liking condition reported that Cs liked them more ($M = 5.71, SD = 0.81$) than did those in the low liking condition ($M = 4.05, SD = 1.20$), $t(94) = 8.00, p < .001$. Cs' coded nonverbal liking behaviors were examined in a mixed-model repeated-measures analysis of variance (ANOVA) with behavior manipulation as the between-subjects factor and time as the within-subjects factor. The ANOVA produced a significant between-subjects main effect for behavior, $F(1, 94) = 204.03, p < .001, \eta^2 = .69$. Confederates in the high liking condition exhibited greater nonverbal liking behavior ($M = 4.14, SD = .64$) than did those in the low liking condition ($M = 2.51, SD = .47$).

Desire manipulation. The pilot study provided the direct test of the success of the desire manipulation. As anticipated, those induced to desire liking reported that they did want the confederate to like them ($M = 6.00, SD = .92$) more than those induced to desire disliking ($M = 1.75, SD = .94$), $t(22) = 11.16, p < .001$.

Talk time. Cs' talk time was measured in seconds, to ascertain whether the four confederates differed from each other.⁷ A one-way ANOVA revealed a nonsignificant difference in talk time across the four confederates, $F(3, 115) = 1.77, p = .16$.

Hypotheses and Research Question

The hypotheses address those conditions under which participants' desires and expectations are congruent. The first hypothesis predicts that Ps match Cs' behaviors when Ps' expectations and desires match Cs' behaviors. The second prediction is that Ps react with complementarity when their expectations and desires are incongruent with Cs' behaviors. The research question asks what patterns of adaptive behavior are produced when expectations and desires conflict with each other.

As one way to address the hypotheses and research question, we compared Ps' coded liking scores across conditions at the beginning of the conversation. This allowed us to examine Ps' behavior before it is likely to have become entrained with confederates'. To test the hypotheses, we compared the four cells involving congruent desires and expectations. Means in these four cells differed significantly from each other, $F(3, 47) = 17.85, p < .001, \eta^2 = .55$.⁸ As the first hypothesis predicted, Ps' coded liking scores were higher when Ps expected, desired, and received liking ($M = 4.59, SD = .81$) than when they expected, desired, and received disliking ($M = 2.57, SD = .61$), $t(22) = 6.88, p < .001$, suggesting that Cs' behaviors were largely matched. Likewise, Ps displayed less liking behavior when they expected and desired disliking but received liking ($M = 2.95, SD = .69$) than when they expected

TABLE 2
 CODED LIKING SCORES BY BEHAVIOR AND DESIRE/EXPECTATION CONGRUENCE

	Desire & Expect L	Desire & Expect D	Desire L, Expect D	Desire D, Expect L
Confederate Enacted Liking	4.78 (.81)	2.89 (.69)	4.74 (.62)	3.05 (1.05)
Confederate Enacted Disliking	3.61 (.44)	2.51 (.61)	3.69 (.59)	2.66 (.38)

Notes: L = liking, D = disliking. Standard deviations are in parentheses.

and desired liking but received disliking, ($M = 3.42$, $SD = .75$), but the difference was just shy of significance, $t(22) = 1.58$, $p = .06$.

A second analysis of Time 1 scores examined those conditions involving incongruent expectations and desires. Ps' nonverbal liking behaviors differed significantly as a function of condition, $F(3, 46) = 21.50$, $p < .001$, $\eta^2 = .60$. *Post-hoc* analysis with the Student-Newman-Keuls test revealed that Ps behaved largely in accordance with their desires. The most liking behavior was enacted by those who desired liking and received it ($M = 4.44$, $SD = .73$), and then by those who desired liking but received disliking ($M = 3.57$, $SD = .43$). Contrariwise, the least liking behavior was enacted by those who desired disliking and received it ($M = 2.65$, $SD = .46$), and then by those who desired disliking but received liking ($M = 2.78$, $SD = .76$).

To address the predictions and the research question while taking time into account, we created a variable representing the *congruence* between expectation and desire. The new variable had four levels: (a) desire and expect liking; (b) desire and expect disliking; (c) desire liking and expect disliking; (d) desire disliking and expect liking. This variable was entered as a between-subjects factor in a mixed-model repeated-measures ANOVA with the eight time periods as the within-subjects factor. The dependent variable was Ps' coded nonverbal liking behavior. The ANOVA produced several significant effects including a congruence-by-confederate behavior interaction, $F(3, 81) = 2.82$, $p = .04$, $\eta^2 = .10$. (Other significant effects are discussed below.) Table 2 provides means and standard deviations for the congruence-by-behavior interaction.

The hypotheses speak to the scores represented in the first two columns of the table. Consistent with hypothesis 1, Ps who desired, expected, and received liking enacted greater liking behavior than did Ps who desired, expected, and received disliking, $t(22) = 7.82$, $p < .001$, indicating that Cs' behaviors were largely matched. Likewise, Ps who desired and expected liking but received disliking enacted significantly greater liking behavior than did those who desired and expected disliking but received liking behavior, $t(22) = 3.05$, $p = .003$. These results provide direct support for hypotheses 1 and 2.

The research question addressed the behaviors of Ps who had incongruent desires and expectations. These conditions are represented in the third and fourth columns of Table 2. The mean scores indicated that Ps behaved largely in accordance with their desires. Ps whose desires and expectations were incongruent enacted the most liking behavior when they desired to be liked and the least liking behavior when they desired to be disliked, irrespective of Cs' actual behavior.

As Burgoon, Stern et al. (1995) noted, between-dyad comparisons and within-dyad comparisons can yield different conclusions regarding matching and complementarity. We thus followed their suggestion that both be analyzed and reported. To examine further the matched or complementary nature of Ps' behaviors, we

TABLE 3
 PARTICIPANTS' AND CONFEDERATES' CODED LIKING SCORES BY BEHAVIOR
 AND DESIRE/EXPECTATION CONGRUENCE

	Desire & Expect L	Desire & Expect D	Desire L, Expect D	Desire D, Expect L
Liking Condition				
Participants' score	4.78 (.81)*	2.89 (.69)*	4.74 (.62)*	3.05 (1.05)*
Confederates' score	3.94 (.66)	4.33 (.71)	4.10 (.69)	4.18 (.50)
Disliking Condition				
Participants' score	3.61 (.44)*	2.51 (.61)	3.69 (.59)*	2.66 (.38)
Confederates' score	2.59 (.49)	2.45 (.36)	2.53 (.51)	2.46 (.53)

Notes: L = liking, D = disliking. Standard deviations are in parentheses. Means in pairs marked with an asterisk differ from each other at $p < .05$ or less, based on one-tailed pairwise t -tests.

compared Ps' behavioral scores to those of confederates in each condition. These comparisons are provided in Table 3. It should be recalled here that Cs' and Ps' behaviors were each coded at eight times within the conversation, so the scores on Table 3 represent the aggregate of those eight time periods.

In general, significant pairwise differences between Ps' and Cs' scores should suggest complementarity, while nonsignificant differences should signal matching. Several of these comparisons provide useful information. As predicted, Ps who desired, expected, and received disliking responded to Cs' liking behaviors with a nearly identical level of liking behavior themselves. Ps who desired, expected, and received liking had a significantly different behavior score than did Cs'; however, they demonstrated a higher level of liking behavior than was exhibited by Cs themselves, which argues for treating this as an instance of matching rather than complementarity. In the conditions in which complementarity was predicted by hypothesis 2, Ps' mean scores were at least one full point above or below Cs', in a direction suggestive of strong complementary responses.

With one exception, Ps with incongruent desires and expectations responded to Cs with behaviors that were in the direction of Ps' desires. This was true for both cells in the third column (participants who desired liking but expected disliking) and for those who desired disliking but expected and received liking. The only cell to deviate from this pattern was that in which Ps desired disliking, expected liking, and received disliking, who exhibited slightly greater liking behavior than did Cs.

Another way to examine matching and complementarity in these within-dyad data is through the correlation between Ps' and Cs' scores, with positive correlations suggesting matching patterns and negative correlations suggesting complementarity. One-tailed Pearson correlations were used to test hypotheses 1 and 2, while the research question were tested with two-tailed correlations. To preserve statistical power, the two cells in which matching was hypothesized were combined and the two cells in which complementarity was hypothesized were combined, to create cells in which $n = 24$. As predicted, Cs' and Ps' behaviors were positively related in those conditions wherein desires and expectations matched behavior, $r(22) = .78$, $p < .001$, providing further support for hypothesis 1. Further, Cs' and Ps' behaviors were inversely related in those conditions wherein desires and expectations did not match behavior, $r(22) = -.34$, $p = .045$, supporting hypothesis 2. Ps' and Cs' behaviors produced nonsignificant correlations in each of the cells representing incongruent desires and expectations.⁹

The repeated-measures ANOVA produced other significant effects in addition to the hypothesized congruence-by-confederate behavior interaction. Confederate behavior produced a main effect in which Ps exposed to a high-liking C exhibited greater liking behavior ($M = 3.88$, $SD = 1.19$) than did those exposed to a low-liking C ($M = 3.12$, $SD = .74$, $F(1, 81) = 25.17$, $p < .001$, $\eta^2 = .24$). Congruence condition also produced a main effect on Ps' behavior, $F(3, 81) = 30.96$, $p < .001$, $\eta^2 = .53$. Ps exhibited the most liking behavior when they desired and expected liking ($M = 4.20$, $SD = .88$) and when they desired liking but expected disliking ($M = 4.22$, $SD = .80$); they exhibited the least liking behavior when they desired and expected disliking ($M = 2.70$, $SD = .66$) and when they desired disliking but expected liking ($M = 2.85$, $SD = .79$). *Post-hoc* analysis with the SNK test indicated that these two pairs of conditions differed significantly from each other.

The ANOVA produced the following significant within-subjects effects, which are based on Huynh-Feldt-corrected degrees of freedom due to violation of compound symmetry assumptions: time, $F(5.420, 439.00) = 5.62$, $p < .001$, $\eta^2 = .07$; time-by-congruence, $F(16.259, 439.00) = 2.31$, $p = .003$, $\eta^2 = .08$. The time effect produced a significant deviation from linearity, $F(1, 81) = 6.46$, $p = .013$, $\eta^2 = .07$, and the time-by-congruence interaction produced a near-significant deviation, $F(3, 81) = 2.17$, $p = .097$, $\eta^2 = .08$. The means and standard deviations for the main and interaction effects (which are available on request of the first author) indicate that the most liking behavior was displayed by those induced to desire it, with cyclical fluctuations over time. The greatest fluctuations occurred for participants who expected liking (whether or not they desired it). These results suggest a degree of volatility over time in Ps' behaviors that may simply reflect the ebb and flow of normal interaction.

Discussion

Although vital for the development of personal relationships, the expression of liking can be fraught with risk, due largely to uncertainty over whether such expressions will be reciprocated. The present investigation was designed to shed light on the critical factors that influence behavioral responses to expressions of liking. Interaction adaptation theory was used to predict the effects that individuals' desires and expectations have on how they respond to liking behavior. Although expectations exerted some influence, the results implicate individuals' desires to be liked or disliked as a primary antecedent of their behavioral responses to such expressions.

In line with interaction adaptation theory, we predicted that participants would match behaviors that were congruent with their interaction position. This hypothesis encompassed those conditions in which participants' desires and expectations matched the behavior enacted by confederates. IAT further proposes that when the IP is incongruent with actual behavior, responses are in the direction of whichever is more positively valenced. Thus, a complementary pattern was predicted when participants' IP was incongruent with Cs' behaviors.

Several results lent support to these hypotheses. As an initial test of the predictions, we compared participants' scores across conditions for the first coded time period (i.e., the first thirty seconds of the conversation). The comparison of participants' Time 1 scores was an informative preliminary test of the predictions because, as other investigations have demonstrated, communicators can easily become

entrained to others' behaviors, largely reciprocating those behaviors despite preinteraction goals or expectations to the contrary. For instance, Burgoon, Le Poire et al. (1995) concluded, "if people are actually permitted to interact, the role of expectancies may pale in comparison to the actual here-and-now behavior of a co-interactant" (p. 312). As a result, adaptation patterns observed during the initial phases of an interaction may have a tendency to wane as individuals become entrained to the stimulus behavior. Our comparisons indicated the highest initial nonverbal liking scores in those conditions predicted to match liking and compensate for disliking, with the lowest initial scores emerging in the conditions predicted to compensate for disliking (indicating complementarity rather than matching).

Of course, participants' behaviors at the start of the conversation may not tell the whole story. We also examined participants' behaviors over time and found that confederate behavior and the congruence between participants' desires and expectations interacted to affect participants' behaviors but that this effect did not interact with time. When we compared participants' aggregated scores by condition, we found that participants who desired and expected liking enacted the most nonverbal liking behavior (matching confederates who enacted liking and compensating for confederates who enacted disliking), and that participants who desired and expected disliking enacted the least nonverbal liking behavior (compensating for confederates who enacted liking and matching confederates who enacted disliking). These results provided additional support for the hypotheses but also suggested that participants' responses to confederates' behaviors were more global than processual. That is, participants in the various conditions differed in their aggregate behavior but did not systematically become more or less reciprocal or compensatory over time. This is likely due, at least partially, to the way in which confederates' behavior was manipulated. In other studies (e.g., Manusov, 1995; White & Burgoon, 1997), confederate behavior was manipulated *within* interactions; confederates began experimental interactions in a baseline, nonmanipulated manner and then increased or decreased their involvement at a given point during the interaction. In the present investigation, confederate behavior was manipulated *between* interactions; that is, some conversations involved a high-liking confederate and others a low-liking confederate, but confederates were not instructed to change their assigned behavior at any points within the conversation. Thus, the most appropriate index of participants' adaptation patterns in the present study may be simply the mean differences observed between cells, aggregated across time. Time did exert a main effect and interacted with desire/expectancy congruence to affect participants' behaviors irrespective of confederates' behaviors. These effects are suggestive of behavioral volatility over time that may indicate an over-arching ebb and flow of the conversations that is independent of particular behaviors, expectations, or desires.

Following Burgoon, Stern et al.'s (1995) suggestion, we also conducted within-dyad comparisons. In addition to comparing aggregated mean behavior scores across conditions, we compared participants' scores to confederates' scores within conditions. In those conditions in which matching was hypothesized, a positive correlation was observed between confederates' and participants' behaviors. Likewise, an inverse correlation emerged in the conditions for which complementarity was predicted. Like the between-dyad comparisons, these within-dyad results provide additional support for the hypotheses.

Mean scores for those cells addressed in the research question indicated that participants behaved largely in accordance with their desires. Participants in these cells enacted the most liking behavior when they desired to be liked and the least liking behavior when they desired to be disliked, regardless of how confederates actually behaved. This pattern is in line with what would be predicted by strategic communication models (see Ickes et al., 1982). Treating communication as a goal-oriented process, strategic communication models predict that when individuals anticipate undesirable behavior from their partners (which is the case when desires and expectations are incongruent), they enact the desired behavior as a way of eliciting that behavior from their partners via the norm of reciprocity. The means from those cells in which desires and expectations were incongruent appear to reflect this pattern.

Implications for Interaction Adaptation Theory

Taken as a whole, the present results provide the most direct support for IAT to date. On nearly every account, the hypotheses regarding the influence of individuals' expectations and desires on their responses to others' behaviors were supported. Although other theories have capitalized on the influence of expectations (e.g., expectancy violations theory) or of desires and goal states (e.g., strategic communication models), IAT is among the first to integrate these influences with each other and with one's need states. Whereas previous studies have produced several correlational results that are consistent with IAT's tenets, the present experiment demonstrates direct relationships between the expectations and desires with which individuals enter interactions and their eventual behavioral responses to their partners' behaviors.

Notable among the current findings is that participants enacted complementary behaviors in response to expressions of liking when they had been induced to desire that the confederate dislike them. These conditions provided an important test of IAT, given the extent to which people generally prefer to be liked (Brown & Levinson, 1987) and prefer pleasantness in initial interactions (Burgoon, 1994). According to IAT, however, when one desires to be disliked in a given interaction, as an element of one's interaction position that desire should override the effects of the inherent positivity of liking behavior, causing one to compensate for such behavior rather than reciprocate it. The present experiment supported this counter-intuitive prediction, suggesting that the predictive power of IAT is not limited to behaviors that one would normatively desire or expect, but also to those that are undesired or unexpected in a specific interaction.

The results speak to two issues that are important for the future refinement of the theory, the first being the relative salience of expectations and desires in comprising one's interaction position. IAT leaves open the possibility that either may exert greater influence than the other, depending on which is more salient in a given situation. For instance, one might anticipate that strangers' interactions will be guided largely by expectations and social norms, rather than their individual desires, because strangers within a given culture can often presume that such norms are mutually understood and will be adhered to, which reduces uncertainty. Such presumptions cannot as readily be made about strangers' desires for each others' behaviors.

In the present study, however, participants' desires carried the day, even though

participants' interactions were with strangers. It may be the case that expectations are more salient among strangers with respect to routinized social behavior (e.g., interaction between a clerk and customer in a grocery store check-out line), which tends to be perfunctory and role-driven. However, behaviors such as the expression of liking or disliking, which convey a sender's evaluations of the receiver as a person, may fall outside the boundaries of role-driven social interaction and may therefore be more subject to individuals' personal desires than their expectations. Future research addressing a variety of interaction behaviors can assist in disentangling the effects of expectations and desires, adding specificity to IAT.

A second theoretic issue raised in the current investigation focuses on the conceptualization of behavior valence as a function of one's desires. While the valence of a given behavior may be influenced by characteristics of the actor (such as attractiveness or other rewarding virtues) or may be resident within the behavior itself, the present results suggest that it may also be a function of whether the behavior conforms to one's desires. This is a particularly important point with behaviors such as those associated with the communication of liking, which might be assumed to be inherently positive due to their validation of the recipient. However, if the behaviors are either misinterpreted in a negative way (e.g., interpreted as an unwelcome romantic gesture) or if they are construed to threaten equally important negative face needs (i.e., place an unwelcome obligation on the recipient), then they may be undesired and therefore valenced negatively. Because behavior valence is an important predictive component of IAT as well as other theories that predict responses to behavior (e.g., EVT), this conceptualization of valence can add specificity and predictive power when considered in tandem with other conceptual definitions.

Limitations and Conclusions

A potential limitations of the current investigation, with methodological implications for future experiments, centers on the operationalization of expectation. The expectation manipulation in this study was a manipulation of *predictive* expectancies; that is, it induced participants to expect a confederates to behave in a certain way based on how the confederates acted during the beginning of each session (see Staines & Libby, 1986). While the manipulation check confirmed that confederates' preinteraction behavior created sufficiently different expectancies on the part of participants, the degree to which those expectations genuinely influenced participants' approaches to the conversations is open to question. It is possible that confederates' preinteraction liking and disliking behaviors elicited different attributions from participants, and that participants' attributions influenced the relative salience of the liking and disliking expectancies. For instance, Manusov (1990; Manusov, Floyd, & Kerssen-Griep, 1997) has demonstrated that negative nonverbal behaviors are more likely to generate conscientious attributions from receivers than are positive nonverbal behaviors. As a result, while accepting confederates' preinteraction liking behavior as normative, participants may have given conscious thought to explaining confederates' preinteraction disliking behavior, potentially diluting the effect of that behavior on their own approach to the conversation.

For example, a participant preinteraction disliking behavior may attribute that behavior to situational factors (e.g., the confederate is having a bad day, is bored with this study) rather than to the confederate's disposition toward the participant.

Although the fundamental attribution error suggests that dispositional attributions for behavior (i.e., implicating internal causes) are more probable than situational attributions (i.e., implicating external causes), especially among strangers (Jones, 1979; Ross, 1977), Floyd and Voloudakis (1999b) argued for a relational implications model of attribution-making, suggesting that when dispositional attributions are accompanied by unfavorable relational implications for receivers, receivers will opt for situational attributions in an effort to “explain away” the behavior and relieve themselves from having to attend to those relational implications. If such a model is correct, the participants who received preinteraction disliking behavior may have been motivated to formulate situational attributions for the behavior, so that they did not have to deal with the face-threatening position of thinking the confederate would actually dislike them. Such an attribution may have diluted the potency of the expectancy manipulation, however. This possibility could be investigated by comparing these results to those of future studies manipulating expectations with weaker relational implications than expectations to be liked.

A related issue concerns the check of the expectancy manipulation. As others (e.g., Burgoon, Le Poire et al., 1995) have pointed out, asking participants to report on their expectations prior to an interaction may heighten their sensitivity to their expectations and cause reactant behavior. The fact that expectancies were manipulated by confederates’ own preinteraction behavior attenuated our concern, however, since participants were probably less likely to associate their expectations with the experimental design than they might have been if the researcher had administered the expectancy induction. The alternative of checking the manipulation after the interaction was deemed less desirable, however, given that participants’ expectations would likely have been modified during the interactions in the directions of confederates’ actual behavior.

The desire manipulation was designed to use one’s motivation to avoid unwelcome obligation to induce a desire to be liked or disliked. As an anonymous reviewer pointed out, it is possible that, because participants were told that an unknown observer would be watching them, the manipulation was confounded with participants’ anxiety about the possibility of having to interact with that person. However, such anxiety, if experienced by participants, should have the effect of strengthening participants’ motivations to elicit liking or disliking from confederates as a means of avoiding this undesired interaction. Thus, we believe that such anxiety would produce manipulation-consistent, rather than confounding, effects.

The relational context in which the experimental interactions occurred was fairly restricted—college students meeting for the first time and interacting in a laboratory—which may limit the generalizability of the findings. The behavioral responses observed in the current investigation may not be evident in interactions between friends, family members, or romantic partners, or between strangers interacting in different contexts. For one, affectionate nonverbal behavior should be more expected and more positively valenced in established, intimate relationships than it is among strangers. Moreover, in nonromantic relationships (e.g., friends or strangers) such behavior is generally more expected and more favorably evaluated in contexts that readily dictate nonromantic interpretations of the behavior—athletes patting each other on the behind, for instance (see Floyd & Morman, 1997).

An additional limitation of the current study is that the sample was homogenous with respect to age and education level. The potential effects of these variables on

responses to expressions of liking have been virtually ignored in research, although in their study of fathers and adult sons, Morman and Floyd (1998a) reported that fathers were more affectionate (verbally and nonverbally), and considered affectionate behavior more desirable, than sons. The influences that these and other demographic variables, as well as context and relationship type, have on individuals' patterns of expressing liking or affection and on their responses to such expressions are important avenues for future research.

In summary, the present experiment indicates that in initial interactions between strangers, individuals enact liking behavior when they desire it from their partners, whether or not they have received such behavior and whether or not they expect it. Conversely, individuals engage in substantially less liking behavior when they do not desire the same from their partners. This, again, appears to be true whether or not such behavior was expected or received.

Perhaps the most potent implication of these findings is that expressions of liking may not always be considered positive. The intuitive notion about the communication of liking, affection, or fondness is that it is consistently associated with positive relational outcomes; indeed it is often considered one of the key indicators of relational escalation (see, e.g., Owen, 1987). However, if IAT is correct in its assertion that individuals compensate for behaviors that are less positively valenced than they require, expect, or desire, then the present findings suggest the counterintuitive notion that expressions of liking can be considered negative, rather than positive, events. Future research might further explore the effects of expressions of liking by examining the conditions under which they elicit positive or negative attributions (see Floyd & Voloudakis, 1999b), or serve as potential threats to positive or negative face.

Notes

¹Same-sex dyads were used because previous research has suggested that patterns of interaction in opposite-sex dyads can be influenced by sex role socialization that encourages accommodation to males by females (see Giles, Coupland, & Coupland, 1991), which can confound the results.

²The specific topics were: (1) Tell about the most significant person in your life right now; (2) Describe an embarrassing situation or incident from your childhood; (3) What do you think makes a successful romantic relationship? (4) What do you see your life being like ten years from now? and (5) Describe the most unpleasant job you have ever had to do.

³The items were: "Person A will be very friendly," "I will not get along well with Person A" (reverse-scored), "Person A will like me," and "Person A will express interest in getting to know me" ($\alpha = .59$).

⁴The items were: "My partner acted as if he or she liked me," "My partner made it clear that he or she was not interested in me" (reverse-scored), and "My partner seemed to get along with me well" ($\alpha = .74$).

⁵Participants were asked "How much do you want Person A to: like me—dislike me; feel connected to me—not feel connected to me; wish to interact with me again—not wish to interact with me again" ($\alpha = .98$).

⁶Principal-components factor analyses were conducted to verify the unidimensionality of the manipulation check scales. In each case, the analysis produced the expected single-factor structure, with high primary loadings, no complex items, and acceptable internal reliability.

⁷The talk time score represents the number of seconds the person spoke during the conversation. This score includes talk time for question five (which was not included in the nonverbal coding). However, Cs' talk time score does not include the time spent reading each of the five questions aloud, since reading the questions was a function of Cs' role in the interaction.

⁸In this and all ANOVAs, confederate gender was originally included as a fixed factor and confederate was originally included as a random factor. These factors were subsequently removed after failing to produce any main or interaction effects.

⁹Although one-tailed correlations might have been used to adjust the Type II error rate, all of the coefficients would have remained nonsignificant.

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