

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/15420847>

# The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation

Article in *Psychological Bulletin* · June 1995

DOI: 10.1037/0033-2909.117.3.497 · Source: PubMed

---

CITATIONS

8,837

---

READS

18,214

2 authors:



Roy Baumeister

The University of Queensland

616 PUBLICATIONS 75,208 CITATIONS

SEE PROFILE



Mark Leary

Duke University

267 PUBLICATIONS 32,579 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Self-Presentational Authenticity, Variability, and Well-Being [View project](#)



Equalitarianism: A Source of Liberal Bias [View project](#)

# The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation

Roy F. Baumeister  
Case Western Reserve University

Mark R. Leary  
Wake Forest University

A hypothesized need to form and maintain strong, stable interpersonal relationships is evaluated in light of the empirical literature. The need is for frequent, nonaversive interactions within an ongoing relational bond. Consistent with the belongingness hypothesis, people form social attachments readily under most conditions and resist the dissolution of existing bonds. Belongingness appears to have multiple and strong effects on emotional patterns and on cognitive processes. Lack of attachments is linked to a variety of ill effects on health, adjustment, and well-being. Other evidence, such as that concerning satiation, substitution, and behavioral consequences, is likewise consistent with the hypothesized motivation. Several seeming counterexamples turned out not to disconfirm the hypothesis. Existing evidence supports the hypothesis that the need to belong is a powerful, fundamental, and extremely pervasive motivation.

The purpose of this review is to develop and evaluate the hypothesis that a need to belong is a fundamental human motivation and to propose that the need to belong can provide a point of departure for understanding and integrating a great deal of the existing literature regarding human interpersonal behavior. More precisely, the belongingness hypothesis is that human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships. Satisfying this drive involves two criteria: First, there is a need for frequent, affectively pleasant interactions with a few other people, and, second, these interactions must take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare. Interactions with a constantly changing sequence of partners will be less satisfactory than repeated interactions with the same person(s), and relatedness without frequent contact will also be unsatisfactory. A lack of belongingness should constitute severe deprivation and cause a variety of ill effects. Furthermore, a great deal of human behavior, emotion, and thought is caused by this fundamental interpersonal motive.

The hypothesis that people are motivated to form and maintain interpersonal bonds is not new, of course. John Donne (1975) has been widely quoted for the line "No [person] is an island." In psychology, the need for interpersonal contact was asserted in several ways by Freud (e.g., 1930), although he tended to see the motive as derived from the sex drive and from the filial bond. Maslow

(1968) ranked "love and belongingness needs" in the middle of his motivational hierarchy; that is, belongingness needs do not emerge until food, hunger, safety, and other basic needs are satisfied, but they take precedence over esteem and self-actualization. Bowlby's (e.g., 1969, 1973) attachment theory also posited the need to form and maintain relationships. His early thinking followed the Freudian pattern of deriving attachment needs from the relationship to one's mother; he regarded the adult's need for attachment as an effort to recapture the intimate contact that the individual had, as an infant, with his or her mother.<sup>1</sup> Horney (1945), Sullivan (1953), Fromm (1955, 1956), de Rivera (1984), Hogan (1983), Epstein (1992), Ryan (1991), Guisinger and Blatt (1994), and others have made similar suggestions. The existence of a need to belong is thus a familiar point of theory and speculation, although not all theorists have anticipated our particular formulation of this need as the combination of frequent interaction plus persistent caring. Moreover, most theorists have neglected to provide systematic empirical evaluation of this hypothesis. For example, Maslow's (1968) influential assertion of a belongingness need was accompanied by neither original data nor review of previous findings. Thus, despite frequent, speculative assertions that people need to belong, the belongingness hypothesis needs to be critically evaluated in light of empirical evidence. A main goal of the present article is to assemble a large body of empirical findings pertinent to the belongingness hypothesis to evaluate how well the hypothesis fits the data.

Another goal of this article is to demonstrate the broad applicability of the need to belong for understanding human motivation and behavior. Even though many psychological theorists have noted human affiliative tendencies in one form or another, the field as a whole has neglected the broad applicability of this

---

Roy F. Baumeister, Department of Psychology, Case Western Reserve University; Mark R. Leary, Department of Psychology, Wake Forest University.

We thank Bob Hogan, Ned Jones, Richard Moreland, Dave Myers, Len Newman, Paula Pietromonaco, Harry Reis, Dan Wegner, and Diane Tice for comments on preliminary drafts.

Correspondence concerning this article should be addressed to Roy F. Baumeister, Department of Psychology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, Ohio 44106-7123. Electronic mail may be sent via Internet to rfb2@po.cwru.edu.

---

<sup>1</sup> His later thinking may, however, have moved beyond this view to regard attachment needs as having a separate, even innate basis rather than being derived from the contact with one's mother; in this later view, he treated the relationship to one's mother as simply an influential prototype of attachment.

need to a wide range of behaviors. Thus, for example, the motive literature has been dominated by research on the respective needs for power, achievement, intimacy, approval, and, to a lesser extent, affiliation. But the need for power may well be driven by the need to belong, as we suggest later. Likewise, people prefer achievements that are validated, recognized, and valued by other people over solitary achievements, so there may be a substantial interpersonal component behind the need for achievement. And the needs for approval and intimacy are undoubtedly linked to the fact that approval is a prerequisite for forming and maintaining social bonds, and intimacy is a defining characteristic of close relationships. The need to belong could thus be linked to all of them.

Furthermore, even a quick glance at research on social behavior from the perspective of the belongingness hypothesis raises the possibility that much of what human beings do is done in the service of belongingness. Thus, the belongingness hypothesis might have considerable value for personality and social psychology and even for psychology as a whole. As a broad integrative hypothesis, it might help rectify what some observers have criticized as fragmentation and atomization in the conceptual underpinnings of the field (see Vallacher & Nowak, 1994; West, Newsom, & Fenaughty, 1992).

At the interdisciplinary level, the belongingness hypothesis might help psychology recover from the challenge posed by cultural materialism. Cultural materialism (e.g., Harris, 1974, 1978, 1979) is based on the assumption that human culture is shaped primarily by economic needs and opportunities, and so historical, anthropological, sociological, and other cultural patterns should mainly be analyzed with reference to economic causes. In that framework, psychology is reduced to a vastly subordinate role; psychological phenomena are regarded merely as symptoms or coping mechanisms that follow from economic realities. In contrast, the belongingness hypothesis would suggest that human culture is at least partly adapted to enable people to satisfy the psychological need to live together (along with economic needs, to be sure), thereby assigning some fundamental causal power to psychological forces. We suggest that belongingness can be almost as compelling a need as food and that human culture is significantly conditioned by the pressure to provide belongingness.

Modern personality and social psychologists have shown a pervasive reluctance to entertain sweeping generalizations and broad hypotheses. This reluctance may well be a response to speculative excesses of earlier generations of theorists, who supposedly rushed to formulate broad theories from intuition and impression. Today there may be a sense that it is more appropriate to await the passing of a substantial interval, until considerable empirical work has been done. We propose that such an interval has passed, however, making it possible to begin considering broad hypotheses in light of the evidence accumulated through the last three decades. That is what we undertake here.

## Conceptual Background

### *Fundamental Motivations: Metatheory*

Before proceeding with our examination of the need to belong, we must consider briefly the metatheoretical requirements

of our hypothesis. That is, what criteria must be satisfied to conclude that the need to belong, or any other drive, is a fundamental human motivation? We suggest the following. A fundamental motivation should (a) produce effects readily under all but adverse conditions, (b) have affective consequences, (c) direct cognitive processing, (d) lead to ill effects (such as on health or adjustment) when thwarted, (e) elicit goal-oriented behavior designed to satisfy it (subject to motivational patterns such as object substitutability and satiation), (f) be universal in the sense of applying to all people, (g) not be derivative of other motives, (h) affect a broad variety of behaviors, and (i) have implications that go beyond immediate psychological functioning. We consider each of these criteria in turn.

The first criterion is that a fundamental motivation should operate in a wide variety of settings: any motive that requires highly specific or supportive circumstances to produce effects cannot properly be called fundamental. Certain circumstances may retard or prevent its operation, but in general the more widely it can produce effects, the stronger its claim to being a fundamental motivation.

The second and third criteria refer to emotional and cognitive patterns. Cognitive and emotional responses reflect subjective importance and concern, and a motivation that fails to guide emotion and cognition (at least sometimes) can hardly be considered an important one. In addition, most motivational and drive systems involve hedonic consequences that alert the individual to undesired state changes that motivate behavior to restore the desired state and whose removal serves as negative reinforcement for goal attainment.

The fourth criterion is that failure to satisfy a fundamental motivation should produce ill effects that go beyond temporary affective distress. A motivation can be considered to be fundamental only if health, adjustment, or well-being requires that it be satisfied. Also, motivations can be sorted into wants and needs, the difference being in the scope of ill effects that follow from nonsatisfaction: Unsatisfied needs should lead to pathology (medical, psychological, or behavioral), unlike unsatisfied wants. Thus, if belongingness is a need rather than simply a want, then people who lack belongingness should exhibit pathological consequences beyond mere temporary distress.

Substitution and satiation are two familiar hallmarks of motivation. If the need to belong is a fundamental need, then belonging to one group should satisfy it and hence obviate or reduce the need to belong to another group. People may be driven to form social bonds until they have a certain number, whereafter the drive to form attachments would presumably subside. Furthermore, attachment partners should be to some degree interchangeable. Of course, this does not mean that a 20-year spouse or friend can be simply replaced with a new acquaintance. In the long run, however, a new spouse or friend should do as well as the previous one.

The sixth and seventh criteria involve universality and non-derivativeness. Any motivation that is limited to certain human beings or certain circumstances, or any motivation that is derived from another motive, cannot be regarded as fundamental. Universality can be indicated by transcending cultural boundaries. Establishing that a motive is not derivative is not easy, although path-analytic models can suggest derivative patterns. Satisfying the first criterion may also help satisfy the seventh,

because if the motivation operates in a broad variety of situations without requiring particular, favorable circumstances, then it may be presumed to be fundamental. Meanwhile, if the evidence contradicts evolutionary patterns or fails to indicate physiological mechanisms, then the hypothesis of universality or innateness would lose credibility.

The eighth criterion is the ability to affect a wide and diverse assortment of behaviors. The more behaviors that appear to be influenced by a particular motive, the stronger its case for being one of the fundamental motives. Lastly, we suggest that a fundamental motive should have implications that go beyond psychological functioning. If a motivation is truly fundamental, it should influence a broad range of human activity, and hence it should be capable of offering viable and consistent interpretations of patterns observed in historical, economic, or sociological studies.

Falsification is only one relevant approach to evaluating a broad hypothesis about belongingness being a fundamental motivation. The belongingness hypothesis could indeed be falsified if it were shown, for example, that many people can live happy, healthy lives in social isolation or that many people show no cognitive or emotional responses to looming significant changes in their belongingness status. In addition to such criteria, however, hypotheses about fundamental motivations must be evaluated in terms of their capacity to interpret and explain a wide range of phenomena. Part of the value of such a theory is its capacity to provide an integrative framework, and this value is a direct function of the quantity and importance of the behavior patterns that it can explain in a consistent, intelligible fashion. We therefore pay close attention to the potential range of implications of the belongingness hypothesis, in addition to examining how many falsification tests the hypothesis has managed to survive.

### *The Need to Belong: Theory*

In view of the metatheoretical requirements listed in the previous section, we propose that a need to belong, that is, a need to form and maintain at least a minimum quantity of interpersonal relationships, is innately prepared (and hence nearly universal) among human beings. Thus, unlike the Freudian (1930) view that regarded sexuality and aggression as the major driving psychological forces, and unlike the most ambitious behaviorist views that considered each newborn a tabula rasa, our view depicts the human being as naturally driven toward establishing and sustaining belongingness. The need to belong should therefore be found to some degree in all humans in all cultures, although naturally one would expect there to be individual differences in strength and intensity, as well as cultural and individual variations in how people express and satisfy the need. But it should prove difficult or impossible for culture to eradicate the need to belong (except perhaps for an occasional, seriously warped individual).

The innate quality presumably has an evolutionary basis. It seems clear that a desire to form and maintain social bonds would have both survival and reproductive benefits (see Ainsworth, 1989; Axelrod & Hamilton, 1981; Barash, 1977; Bowlby, 1969; D. M. Buss, 1990, 1991; Hogan, Jones, & Cheek, 1985; Moreland, 1987). Groups can share food, pro-

vide mates, and help care for offspring (including orphans). Some survival tasks, such as hunting large animals or maintaining defensive vigilance against predatory enemies, are best accomplished by group cooperation. Children who desired to stay together with adults (and who would resist being left alone) would be more likely to survive until their reproductive years than other children because they would be more likely to receive care and food as well as protection. Cues that connote possible harm, such as illness, danger, nightfall, and disaster, seem to increase the need to be with others (see also Rofe, 1984), which again underscores the protective value of group membership. Adults who formed attachments would be more likely to reproduce than those who failed to form them, and long-term relationships would increase the chances that the offspring would reach maturity and reproduce in turn (see also Shaver, Hazan, & Bradshaw, 1988).<sup>2</sup>

Competition for limited resources could also provide a powerful stimulus to forming interpersonal connections. There are several potential, although debatable, advantages to forming a group under conditions of scarcity. For example, groups may share resources and thus prevent any individual from starving (although sharing deprives other group members of some of their resources), and groups may appropriate resources from nonmembers (although there is the problem of how to distribute them in the group). What appears less debatable is the severe competitive disadvantage of the lone individual confronting a group when both want the same resource. When other people are in groups, it is vital to belong to a group oneself, particularly a group of familiar, cooperative people who care about one's welfare. Thus, an inclination to form and sustain social bonds would have important benefits of defending oneself and protecting one's resources against external threats.

The likely result of this evolutionary selection would be a set of internal mechanisms that guide individual human beings into social groups and lasting relationships. These mechanisms would presumably include a tendency to orient toward other members of the species, a tendency to experience affective distress when deprived of social contact or relationships, and a tendency to feel pleasure or positive affect from social contact and relatedness. These affective mechanisms would stimulate learning by making positive social contact reinforcing and social deprivation punishing.

Our version of the belongingness hypothesis does not regard the need as derived from a particular relationship or focused on a particular individual. In this, it differs from the early, Freudian version of Bowlby's work, in which the relationship to the mother was regarded as the cause of the desire for attachment. Thus, Bowlby suggested that adult attachments to work organizations, religious groups, or others are derived from the child's tie to mother and revolve around personal attachment to the group leader or supervisor (Bowlby, 1969, p. 207). In contrast,

<sup>2</sup> A possible sex difference could be suggested in the mode of expressing this need, however, in that men may be more oriented toward forming relationships, whereas women may be more oriented toward maintaining them. Men can reproduce many times by forming many brief relationships, whereas women can reproduce only about once per year, and so their most effective reproductive strategy would be to enable each child to receive maximal care and protection (D. M. Buss, 1991).

we propose that the need to belong can, in principle, be directed toward any other human being, and the loss of relationship with one person can to some extent be replaced by any other. The main obstacle to such substitution is that formation of new relationships takes time, such as in the gradual accumulation of intimacy and shared experience (see Sternberg, 1986, on the time course of intimacy). Social contact with a long-term intimate would therefore provide some satisfactions, including a sense of belonging, that would not be available in interactions with strangers or new acquaintances.

The belongingness hypothesis can be distinguished from a hypothesized need for mere social contact in terms of whether interactions with strangers or with people one dislikes or hates would satisfy the need. It can be distinguished from a hypothesized need for positive, pleasant social contact in terms of whether nonhostile interactions with strangers would satisfy it. The need to belong entails that relationships are desired, so interactions with strangers would mainly be appealing as possible first steps toward long-term contacts (including practicing social skills or learning about one's capacity to attract partners), and interactions with disliked people would not satisfy it.

Additional differences between the belongingness hypothesis and attachment theory could be suggested, although it may be a matter of interpretation whether these are merely differences of emphasis or fundamental theoretical differences. In our understanding, the (very real) strengths of attachment theory are twofold. First, attachment theory has emphasized the task of elaborating individual differences in attachment style (e.g., Hazan & Shaver, 1994a, 1994b; Shaver et al., 1988), whereas we focus on the commonality of the overarching need to belong. Second, attachment theory has emphasized certain emotional needs and satisfactions implicit in certain kinds of relationships, whereas we regard it as at least plausible that the need to belong could be satisfied in other ways. For example, one might imagine a young fellow without any family or intimate relationships who is nonetheless satisfied by being heavily involved in an ideologically radical political movement. There are undoubtedly strong emotional mechanisms associated with belongingness, as we show later, but these could be understood as mediating mechanisms rather than as essential properties.

As a fundamental motivation, the need to belong should stimulate goal-directed activity designed to satisfy it. People should show tendencies to seek out interpersonal contacts and cultivate possible relationships, at least until they have reached a minimum level of social contact and relatedness. Meanwhile, social bonds should form easily, readily, and without requiring highly particular or conducive settings. (Indeed, if social attachments form through shared unpleasant experiences, contrary to what simple association models might predict, this would be especially compelling support for the belongingness hypothesis.) Cognitive activity should reflect a pervasive concern with forming and maintaining relationships. Emotional reactions should follow directly from outcomes that pertain to the need to belong. More precisely, positive affect should follow from forming and solidifying social bonds, and negative affect should ensue when relationships are broken, threatened, or refused.

If belongingness is indeed a fundamental need, then aversive reactions to a loss of belongingness should go beyond negative affect to include some types of pathology. People

who are socially deprived should exhibit a variety of ill effects, such as signs of maladjustment or stress, behavioral or psychological pathology, and possibly health problems. They should also show an increase in goal-directed activity aimed at forming relationships.

In addition, the belongingness hypothesis entails that people should strive to achieve a certain minimum quantity and quality of social contacts but that once this level is surpassed, the motivation should diminish. The need is presumably for a certain minimum number of bonds and quantity of interaction. The formation of further social attachments beyond that minimal level should be subject to diminishing returns; that is, people should experience less satisfaction on formation of such extra relationships, as well as less distress on terminating them. Satiation patterns should be evident, such that people who are well enmeshed in social relationships would be less inclined to seek and form additional bonds than would people who are socially deprived. Relationships should substitute for each other, to some extent, as would be indicated by effective replacement of lost relationship partners and by a capacity for social relatedness in one sphere to overcome potential ill effects of social deprivation in another sphere (e.g., if strong family ties compensate for aloneness at work).

We propose that the need to belong has two main features. First, people need frequent personal contacts or interactions with the other person. Ideally, these interactions would be affectively positive or pleasant, but it is mainly important that the majority be free from conflict and negative affect.

Second, people need to perceive that there is an interpersonal bond or relationship marked by stability, affective concern, and continuation into the foreseeable future. This aspect provides a relational context to one's interactions with the other person, and so the perception of the bond is essential for satisfying the need to belong. When compared with essentially identical interactions with other people with whom one is not connected, a strictly behavioral record might reveal nothing special or rewarding about these interactions. Yet an interaction with a person in the context of an ongoing relationship is subjectively different from and often more rewarding than an interaction with a stranger or casual acquaintance. To satisfy the need to belong, the person must believe that the other cares about his or her welfare and likes (or loves) him or her.

Ideally this concern would be mutual, so that the person has reciprocal feelings about the other. M. S. Clark and her colleagues (e.g., Clark, 1984; Clark & Mills, 1979; Clark, Mills, & Corcoran, 1989; Clark, Mills, & Powell, 1986) have shown that a framework of mutual concern produces a relationship qualitatively different from one based on self-interested social exchange. Still, it is plausible that mutuality is merely desirable rather than essential. The decisive aspect may be the perception that one is the recipient of the other's lasting concern.

Viewed in this way, the need to belong is something other than a need for mere affiliation. Frequent contacts with nonsupportive, indifferent others can go only so far in promoting one's general well-being and would do little to satisfy the need to belong. Conversely, relationships characterized by strong feelings of attachment, intimacy, or commitment but lacking regular contact will also fail to satisfy the need. Simply knowing that a bond exists may be emotionally reassuring, yet it would not

provide full belongingness if one does not interact with the other person. Thus, we view the need to belong as something more than either a need for affiliation or a need for intimate attachment.

The notion that people need relationships characterized by both regular contact and an ongoing bond has been anticipated to some degree by Weiss (1973; see also Shaver & Buhrmester, 1983), who suggested that feelings of loneliness can be precipitated either by an insufficient amount of social contact (social loneliness) or by a lack of meaningful, intimate relatedness (emotional loneliness). Weiss's distinction has been criticized on conceptual and empirical grounds (e.g., Paloutzian & Janigian, 1987; Perlman, 1987), and efforts to operationalize and test the distinction have met with mixed results (DiTommaso & Spinner, 1993; Saklofske & Yackulic, 1989; Vaux, 1988). In our view, the difficulty with this distinction arises from the assumption that people have a need for mere social contact and a separate need for intimate relationships. Rather, the need is for regular social contact with those to whom one feels connected. From an evolutionary perspective, relationships characterized by both of these features would have greater survival and reproductive value than would relationships characterized by only one. Accordingly, the need to belong should be marked by both aspects.

### Review of Empirical Findings

We searched the empirical literature of social and personality psychology for findings relevant to the belongingness hypothesis. The following sections summarize the evidence we found pertaining to the series of predictions about belongingness.

#### *Forming Social Bonds*

A first prediction of the belongingness hypothesis is that social bonds should form relatively easily, without requiring specially conducive circumstances. Such evidence not only would attest to the presence and power of the need to belong but would suggest that the need is not a derivative of other needs (insofar as it is not limited to circumstances that meet other requirements or follow from other events).

There is abundant evidence that social bonds form easily. Indeed, people in every society on earth belong to small primary groups that involve face-to-face, personal interactions (Mann, 1980). The anthropologist Coon (1946) asserted that natural groups are characteristic of all human beings. Societies differ in the type, number, and permanence of the groups that people join, but people of all cultures quite naturally form groups.

The classic Robbers Cave study conducted by Sherif, Harvey, White, Hood, and Sherif (1961/1988) showed that when previously unacquainted boys were randomly assigned to newly created groups, strong loyalty and group identification ties ensued rapidly. In fact, later in that study, the two strongly opposed groups were recombined into a single group with cooperative goals, and emotional and behavioral patterns quickly accommodated to the new group (although the prior antagonistic identifications did hamper the process).

The tendency for laboratory or experimentally created groups to quickly become cohesive has also been noted in the

*minimal intergroup* situation (Brewer, 1979). Tajfel and his colleagues (Billig & Tajfel, 1973; Tajfel, 1970; Tajfel & Billig, 1974; Tajfel, Flament, Billig, & Bundy, 1971) showed that assigning participants to categories on a seemingly arbitrary basis was sufficient to cause them to allocate greater rewards to in-group members than to out-group members. Indeed, the original goal of Tajfel et al. (1971) was not to study group formation but to understand the causes of in-group favoritism. To do this, they sought to set up an experimental group that would be so trivial that no favoritism would be found, intending then to add other variables progressively so as to determine at what point favoritism would start. To their surprise, however, in-group favoritism appeared at once, even in the minimal and supposedly trivial situation (see also Turner, 1985).

This preferential treatment of in-group members does not appear to be due to inferred self-interest or to issues of novelty and uncertainty about the task (Brewer & Silver, 1978; Tajfel, 1970; Tajfel & Billig, 1974). Inferred similarity of self to in-group members was a viable explanation for many of the early findings, but Locksley, Ortiz, and Hepburn (1980) ruled this out by showing that people show in-group favoritism even when they have been assigned to groups by a random lottery. Thus, patterns of in-group favoritism, such as sharing rewards and categorizing others relative to the group, appeared quite readily, even in the absence of experiences designed to bond people to the group emotionally or materially.

Several other studies suggest how little it takes (other than frequent contact) to create social attachments. Bowlby (1969) noted that infants form attachments to caregivers very early in life, long before babies are able to calculate benefits or even speak. Festinger, Schachter, and Back (1950) found that mere proximity was a potent factor in relationship formation; people seemed to develop social bonds with each other simply because they lived near each other. Nahemow and Lawton (1975) replicated those findings and also showed that pairs of best friends who differed by age or race were particularly likely to have lived very close together, suggesting that extreme proximity may overcome tendencies to bond with similar others. Wilder and Thompson (1980) showed that people seem to form favorable views toward whomever they spend time with, even if these others are members of a previously disliked or stereotyped out-group. In their study, intergroup biases decreased as contact with members of the out-groups increased (and as in-group contact decreased).

We noted that the formation of social attachments under adverse circumstances would be especially compelling evidence because it avoids the alternative explanations based on classical conditioning (i.e., that positive associations breed attraction). Latane, Eckman, and Joy (1966) found that participants who experienced electric shock together tended to like each other more than control participants who did not experience shock, although the effect was significant only among firstborns. Kenrick and Johnson (1979) found that participants rated each other more positively in the presence of aversive than nonaversive noise. Elder and Clipp (1988) compared the persistence of attachments among military veterans and found that the greatest persistence occurred among groups that had undergone heavy combat resulting in the deaths of some friends and com-

rades. Although it would be rash to suggest that all shared negative experiences increase attraction, it does appear that positive bonding will occur even under adverse circumstances.

The development of interpersonal attraction under fearful circumstances has been explained in terms of both misattribution (i.e., people may misinterpret their anxious arousal as attraction to another person) and reinforcement theory (i.e., when the presence of some other person reduces one's distress, a positive emotional response becomes associated with that person; Kenrick & Cialdini, 1977). The misattribution explanation is largely irrelevant to the belongingness hypothesis, but the reinforcement explanation is germane. Specifically, although others may reduce one's distress through various routes (such as distraction, humor, or reassurance), evidence suggests strongly that the mere presence of other people can be comforting (Schachter, 1959). Such effects may well be conditioned through years of experience with supportive others, but they also may indicate that threatening events stimulate the need to belong.

The fact that people sometimes form attachments with former rivals or opponents is itself a meaningful indicator of a general inclination to form bonds. Cognitive consistency pressures and affective memories would militate against forming positive social bonds with people who have been rivals or opponents. Yet, as we have already noted, the Robbers Cave study (Sherif et al., 1961/1988) showed that people could join and work together with others who had been bitterly opposed very recently, and Wilder and Thompson (1980) showed that social contact could overcome established intergroup prejudices and stereotypes. Orbell, van de Kragt, and Dawes (1988) likewise showed that impulses toward forming positive attachments could overcome oppositional patterns. In their study using the prisoner's dilemma game, having a discussion period led to decreased competition and increased cooperation, as a result of either the formation of a group identity that joined the potential rivals together or explicit agreements to cooperate. Thus, belongingness motivations appear to be able to overcome some antagonistic, competitive, or divisive tendencies.

Similar shifts have been suggested by M. S. Clark (1984, 1986; Clark, Mills, & Powell, 1986; Clark, Ouellette, Powell, & Milberg, 1987), who showed that people move toward a communal orientation when there is a chance to form a relationship. When participants were confronted with a person who seemingly would not be amenable to relationship formation (i.e., because she was already married), they interacted with her on the basis of norms of equitable exchange and individuality; when they believed she would be a possible relationship partner, however, they interacted with her on a communal basis (i.e., mutuality and sharing, without respect to individual equity concerns).

*Critical assessment.* The remarkable ease with which social bonds form has been shown with experimental methods and confirmed by other methods. The main limitation would be that people do not always form relationships with all available or proximal others, which could mean that satiation processes limit the number of relationships people seek and which also indicates that other factors and processes affect the formation of relationships. Some patterns (e.g., in-group favoritism in

minimal groups) have been well replicated with careful efforts to rule out alternative explanations.

*Conclusion.* In brief, people seem widely and strongly inclined to form social relationships quite easily in the absence of any special set of eliciting circumstances or ulterior motives. Friendships and group allegiance seem to arise spontaneously and readily, without needing evidence of material advantage or inferred similarity. Not only do relationships emerge quite naturally, but people invest a great deal of time and effort in fostering supportive relationships with others. External threat seems to increase the tendency to form strong bonds.

### *Not Breaking Bonds*

The belongingness hypothesis predicts that people should generally be at least as reluctant to break social bonds as they are eager to form them in the first place. A variety of patterns supports the view that people try to preserve relationships and avoid ending them. In fact, Hazan and Shaver (1994a, p. 14) recently concluded that the tendency for human beings to respond with distress and protest to the end of a relationship is nearly universal, even across different cultures and across the age span.

Some relationships are limited in time by external factors, and so these are logically the first place to look for evidence that people show distress and resistance to breaking bonds. Encounter groups and training groups, for example, are often convened with the explicit understanding that the meetings will stop at a certain point in the future. Even so, it is a familiar observation in the empirical literature (e.g., Egan, 1970; Lacoursiere, 1980; Lieberman, Yalom, & Miles, 1973) that the members of such groups resist the notion that the group will dissolve. Even though the group's purpose may have been fulfilled, the participants want to hold on to the social bonds and relationships they have formed with each other. They promise individually and sometimes collectively to stay in touch with each other, they plan for reunions, and they take other steps to ensure a continuity of future contacts. In actuality, only a small minority of these envisioned reunions or contacts take place, and so the widespread exercise of making them can be regarded as a symptom of resistance to the threatened dissolution (Lacoursiere, 1980, p. 216).

Other relationships are limited in time by external transitions such as graduating from college, moving to a different city, or getting a new job. As such transitions approach, people commonly get together formally and informally and promise to remain in contact, to share meals or other social occasions together, to write and call each other, and to continue the relationship in other ways. They also cry or show other signs of distress over the impending separation (Bridges, 1980). These patterns seem to occur even if the dissolving relationship (e.g., with neighbors) had no important practical or instrumental function and there is no realistic likelihood of further contact.

More generally, many social institutions and behavior patterns seem to serve a need to preserve at least the appearance of social attachment in the absence of actual, continued interaction. Reunions constitute an occasion for people to see former acquaintances. The massive exchange of greeting cards during the Christmas holiday season includes many cases in which the

card is the sole contact that two people have had during the entire year, but people still resist dropping each other's name from the mailing list because to do so signifies a final dissolution of the social bond. In fact, most people will send Christmas cards to perfect strangers from whom they receive cards (Kunz & Woolcott, 1976). People seem not to want to risk damaging a relationship even if they do not know the identity of the other person!

Likewise, social rituals involving greetings and farewells serve to assure others of the continuation of one's relationships with them. Many greetings, particularly those directed at family members and close friends, seem designed to indicate that one's relationship has remained intact since the last contact, and farewells often include some hint that the relationship will be maintained until the people see one another again (Goffman, 1971). The importance of such rituals in the maintenance of belongingness is reflected in the distress people sometimes experience when they feel that another's greeting is inadequately warm or that the other's farewell expresses insufficient concern about the impending separation.

In many cases, people seem reluctant to dissolve even bad or destructive relationships. The apparent unwillingness of many women to leave abusive, battering spouses or boyfriends (Roy, 1977; Strube, 1988) has prompted several generations of speculative explanations, ranging from masochistic or self-destructive liking for abuse to calculations of economic self-interest that supposedly override considerations of physical harm. The belongingness hypothesis offers yet one more potential perspective: The unwillingness to leave an abusive intimate partner is another manifestation of the strength of the need to belong and of the resulting reluctance to break social bonds. The fact that people resist breaking off an attachment that causes pain attests to how deeply rooted and powerful the need to belong is.

Moreover, when people do decide to break off an intimate relationship, they typically experience considerable distress over the dissolution (which we cover in more detail in the later section on emotion). This is ironic: Although goal attainment is usually marked by positive affect such as satisfaction and joy, attaining the goal of getting a divorce is generally accompanied by negative affect. To be sure, in some cases the distress over divorce is accompanied by an admixture of positive affect, but the negative affect nonetheless indicates the resistance to breaking the bond.

It is also relevant and noteworthy that the social bond often continues despite the divorce. In her study on divorce, Vaughan (1986) concluded that "in most cases [marital] relationships don't end. They change, but they don't end" (p. 282). Weiss (1979) also found that some form of (often ambivalent) attachment persists after divorce. The persistence of intimate relationships past the occasion of mutually agreed and formally institutionalized dissolution may be yet another indication of people's reluctance to break social bonds.

*Critical assessment.* Because ethical and practical constraints prevent laboratory experimentation on the ending of significant relationships, the evidence in this section was drawn from observational studies and other methods, and so the hypothesis of resistance to relationship dissolution is not as conclusively supported as might be desired. Alternative explanations exist for some of the findings. For example, the persistence

of relatedness after divorce is partly due to ongoing practical concerns, such as joint responsibility for child care; although Vaughan (1986) was emphatic in asserting that such pragmatic concerns fall far short of explaining the extent of continuing attachments, she was vague about the evidence to back up her assertion. Also, as we noted, the tendency for battered women to return to their abusive partners has been explained in many ways, and the hypothesized reluctance to break off a relationship is only one of them.

On the positive side, however, the persistence of such bonds has been observed by a variety of researchers. The fact that these researchers are from different disciplines suggests that these conclusions do not stem from a single methodological or theoretical bias. More systematic research on possible boundary and limiting conditions of the resistance to dissolve bonds would be desirable.

*Conclusion.* Despite some methodological weaknesses and ambiguities, the weight of the evidence does favor the conclusion that people strongly and generally resist the dissolution of relationships and social bonds. Moreover, this resistance appears to go well beyond rational considerations of practical or material advantage.

### *Cognition*

Intelligent thought is generally recognized as the most important adaptive trait among human beings, and so it seems reasonable to assume that issues of fundamental concern and importance are likely to be the focus of cognitive activity. The belongingness hypothesis therefore would predict that people will devote considerable cognitive processing to interpersonal interactions and relationships.

Basic patterns of thought appear to reflect a fundamental concern with social relationships. Sedikides, Olsen, and Reis (1993) showed that relationships are natural categories; that is, people spontaneously classify incoming information in terms of social relationships. Participants stored information about relationship partners together, and they did this more for strong, close relationships (marriage) than for weak or distant ones (e.g., acquaintanceship). Pryor and Ostrom (1981) showed that people use the individual person as a cognitive unit of analysis for familiar people more than for unfamiliar people. These researchers began by questioning the basic assumption that the person is the fundamental unit of social perception. That is, information is not necessarily or inherently processed and stored in memory on a person-by-person basis, but it is, in fact, processed and stored on such a basis when it pertains to significant others. Ostrom, Carpenter, Sedikides, and Li (1993) provided evidence that information about out-group members tends to be stored and organized on the basis of attribute categories (such as traits, preferences, and duties), whereas in-group information is processed on the basis of person categories. Thus, social bonds create a pattern in cognitive processing that gives priority to organizing information on the basis of the person with whom one has some sort of connection.

Several studies have pursued the notion that people process information about close relationship partners differently from the way they process information about strangers or distant acquaintances. For example, research has shown that,



when a group of people take turns reading words aloud, they each have high recall for the words they personally speak but have poor recall for the words preceding and following their performance. Brenner (1976) found that this next-in-line effect occurs not only for one's own performance but also for words spoken by one's dating partner (and the words immediately preceding and following).

In a series of studies, Aron, Aron, Tudor, and Nelson (1991) showed that close relationship partners, unlike strangers, have cognitive effects similar to those of the self. Thus, when people form an image of themselves or their mothers interacting with some object, they have more difficulty recalling that object than if they imagined a famous but personally unacquainted person interacting with that same object. In another study, participants had more difficulty in making me-not me judgments about traits on which they differed from their spouse than in making judgments about traits on which they resembled the spouse. These results suggest that cognitive processes tend to blur the boundaries between relationship partners and the self, in the form of "including [the] other in the self" (p. 241). In short, these studies confirm that information about relationship partners is singled out for special processing, and they raise the possibility that the need to belong leads to a cognitive merging of self with particular other people. Such patterns of subsuming the individual in the interpersonal unit indicate the importance of these relationships.

Many of the special biases that people exhibit for processing information in ways that favor and flatter themselves are extended to partners in close relationships. Fincham, Beach, and Baucom (1987) showed that self-serving biases that take credit for success and refuse blame for failure operate just as strongly—or even more strongly—when people interpret their spouses' outcomes as when they interpret their own outcomes. That is, events are interpreted in a way that is maximally flattering to the spouse, just as they are interpreted in ways that enhance and protect the self. (These patterns are extended only to partners in good, strong, happy relationships, however; high marital distress is correlated with a breakdown in these partner-serving attributions.)

Likewise, the "illusion of unique invulnerability" (Perloff & Fetzer, 1986) turns out not to be as unique as first thought. Although people are more extremely and unrealistically optimistic about themselves than about some vague target such as the average person, they are equally optimistic about their closest friends and family members. That is, they think that bad things are not as likely to happen either to themselves or to their close friends as to strangers or to a hypothetical average person.<sup>3</sup> Along the same lines, Brown (1986) showed that people (particularly those with high self-esteem) tend to extend self-serving biases to their friends. Specifically, people rate both self and a same-sex friend more favorably than they rate people in general.

Group memberships also appear to exert important influences on cognitive patterns. People expect more favorable and fewer objectionable actions by their in-group than by out-group members, and these expectations bias information processing and memory, leading people to forget the bad things (relative to good things) that their fellow in-group members do (Howard & Rothbart, 1980). People also make group-serving or "sociocen-

tric" attributions for the performance of the groups to which they belong. Members of a successful group may make group-serving attributions that put the entire group in a good light, whereas, after failure, group members may join together in absolving one another of responsibility (Forsyth & Schlenker, 1977; Leary & Forsyth, 1987; Zander, 1971).

Linville and Jones (1980) showed that people tend to process information about out-group members in extreme, black-and-white, simplistic, polarized ways, whereas similar information about members of their own group is processed in a more complex fashion. Thus, the mere existence of a social bond leads to more complex (and sometimes more biased) information processing.

Of broader interest is evidence that belongingness can affect how people process information about nearly all categories of stimuli in the social world. Wegner (1986) noted the irony that traditional theories of the "group mind" tended to assume that all members would essentially think the same thing, because much more far-reaching advantages could be realized through a group mind if each member was responsible for different information, thereby enabling the group to process considerably more information than any one person could. Wegner went on to propose that *transactive memory* processes operate in close relationships and groups by assigning each person a significant category of expertise, with the result that each person becomes expert in one or a few areas and simply consults others when alternative areas come up. An empirical study conducted by Wegner, Erber, and Raymond (1991) supported the transactive memory hypothesis by showing that partners in close relationships apparently have established procedures for determining which person should remember which information. Participants were people in dating couples who were paired either with their partner or with a stranger. The preexisting couples showed better memory for experimental stimuli than the impromptu assigned couples, except when the researchers assigned people at random to be the expert responsible for various categories of stimuli. In this latter condition, apparently, the assignment disrupted the couples' preexisting system and hence impaired the processing of information.

Another broad and very basic issue is how often interpersonal belongingness is used as an interpretive category. C. A. Anderson (e.g., 1991) sought to establish the fundamental dimensions people use for making attributions about the causes of events. His study coded participants' attributional activity along 13 dimensions, including all of the ones featured in the major attri-

<sup>3</sup> Perloff and Fetzer (1986) favored an interpretation for their results in terms of the vagueness of the comparison target over the motivational explanation that people want to regard their closest relationship partners as equally invulnerable (equal to themselves). Their discrimination between the two hypotheses rested on the "one of your friends" condition in their second study: They found that the "closest friend" was seen as being highly invulnerable, whereas when participants chose one of their other friends, this person was seen as more vulnerable. Their findings suggested that participants in that condition selected a friend who seemed most likely to have the problem asked about, so it is difficult to evaluate the motivational hypothesis. Thus, the interpretation emphasized here is consistent with all of Perloff and Fetzer's findings, as they acknowledged, even though their own interpretations tended to favor explanation in terms of vague versus specific targets.

butional theories (e.g., locus, stability, globality, and controllability). To his surprise, however, the strongest single dimension was what he called *interpersonalness*, which was defined as the degree to which the causes of the focal event reflected on the relationship between the individual attributor and other people (e.g., doing something because one is married). Thus, although interpersonalness was not a central concern of his investigation (because the major attribution theories had largely ignored it), it emerged as a major dimension in the way people normally think about and interpret the causes of events. The unexpected emergence of interpersonalness as a powerful fundamental dimension of causal attribution is consistent with the view that belongingness is one of humanity's basic concerns.

Thus far we have provided evidence that interpersonal relationships are centrally important in the way people think. Additional predictions about cognitive activity can be derived from the belongingness hypothesis. Although the evidence is consistent with these predictions, it tends to be subject to alternative explanations based on short-term, pragmatic concerns, so it is less compelling for present purposes. We include brief coverage for the sake of thoroughness.

Clearly, one would predict, on the basis of a need to belong, that people should tend to think particularly about actual and potential relationship partners more than about other people. This would be reflected in increased cognitive processing caused by the expectation of future or further interactions, because these conditions hold the possibility of forming a relationship. Devine, Sedikides, and Fuhrman (1989) confronted participants with advance information about various stimulus persons and found that this information received more thorough and detailed processing when it pertained to a future interaction partner. Monson, Keel, Stephens, and Genung (1982) found that people made more extreme—and more valid—trait attributions from identical information when it pertained to a future interaction partner than when it pertained to someone with whom no interaction was anticipated. Erber and Fiske (1984) showed that interpersonal dependency (outcome dependency) overcame the usual tendency to ignore information that runs counter to expectations. When participants were outcome dependent on the confederate, they paid extra attention to inconsistent information about the confederate and seemed to think more in terms of dispositional attributions about the partner. Thus, belonging to another person changes the way one processes information about that person.

Some of these interaction effects could be interpreted as guided by short-term concerns. Still, the prospect of forming a relationship with a recently met person appears to be sufficient to alter the way people process the interaction. M. S. Clark (1984) showed that people keep track of information differently when the interaction partner is a potential relationship partner. Furthermore, recent work by Tice, Butler, Muraven, and Stillwell (1994) showed that when people were interacting with friends as opposed to strangers, they changed the way they presented information about themselves (i.e., they became more modest). Moreover, the way they encoded and recalled the interaction depended on the relationship: Memory was best if one had been modest with friends or self-enhancing with strangers, and otherwise it was impaired.

*Critical assessment.* The evidence that interpersonal con-

cerns affect cognitive processing is methodologically strong and extensive. A broad variety of experimental procedures has been involved in demonstrating such effects. For present purposes, the main critique would be that some of the studies have not been directly concerned with close relationships. Some have shown that the expectation of interaction with a stranger or new acquaintance is sufficient to alter cognitive processing. Although it is reasonable to infer that people regard meeting new people as the first step in possible relationship formation (perhaps especially among the young adult populations who constitute most of the experimental samples), this inference requires further validation before one can have full confidence in interpreting those findings as evidence for the need to belong, because short-term concerns of practical or material advantage may also play a role in some such situations.

Nonetheless, many of the findings reviewed in this section do pertain to close relationship partners, and there is evidence that information pertaining to interaction partners is processed differently depending on its relevance to lasting relationships. It is thus quite clear that relatedness affects cognitive processing; only the extent of that influence and some of its processes are still open to debate.

*Conclusion.* Concern with belongingness appears to be a powerful factor shaping human thought. People interpret situations and events with regard to their implications for relationships, and they think more thoroughly about relationship (and interaction) partners than about other people. Moreover, the special patterns of processing information about the self are sometimes used for information about relationship partners as well. Thus, both actual and potential bonds exert substantial effects on how people think.

### *Emotion*

The main emotional implication of the belongingness hypothesis is that real, potential, or imagined changes in one's belongingness status will produce emotional responses, with positive affect linked to increases in belongingness and negative affect linked to decreases in it. Also, stable or chronic conditions of high belongingness should produce a general abundance of positive affect, whereas chronic deprivation should produce a tendency toward abundant negative affect.

*Positive affect.* In general, the formation of social bonds is associated with positive emotions. Perhaps the prototype of relationship formation is the experience of falling in love, which is typically marked by periods of intense bliss and joy, at least if the love is mutual (e.g., Sternberg, 1986). When love arises without belongingness, as in unrequited love, the result is typically distress and disappointment (Baumeister & Wotman, 1992). Belongingness is thus crucial if love is to produce bliss.

Likewise, occasions such as new employment, childbirth, fraternity or sorority pledging, and religious conversion, all of which are based on the entry into new relationships and the formation of new social bonds, are typically marked by positive emotions and celebrated as joyous. Childbirth is especially significant in this regard because the data show that parenthood reduces happiness and increases stress, strain, and marital dissatisfaction (e.g., S. A. Anderson, Russell, & Schumm, 1983; Campbell, Converse, & Rodgers, 1976; Glenn & McLanahan,

1982; for reviews, see Baumeister, 1991; Bernard, 1982; Campbell, 1981; Spanier & Lewis, 1980), yet people nonetheless retain a positive image of it, celebrate it, and feel positive about it, both in advance and in retrospect. It is plausible that the formation of the new social bond is directly responsible for the joy and positive feelings, whereas the negative aspects and feelings associated with parenthood arise indirectly from the hassles, conflicts, and stresses that accompany the social bond.

If the formation of bonds is one occasion for joy, a second occasion comes when the bond is formalized into a more recognizably permanent status. A wedding, for example, does not create a new relationship, at least in modern Western cultures, because the bride and groom typically have known each other intimately for some time. The wedding does, however, signify an increase in commitment to maintaining the relationship permanently, and the joyful celebration of the wedding can be regarded as an affective consequence of solidifying the social bond. It is noteworthy that many traditional wedding vows include an actuarially implausible pledge that the marriage will never end ("till death do us part"). In essence, such vows are an institutionalized mechanism for committing people to meet their spouse's belongingness needs.

Although we have emphasized the view of affect as a result of attachment, positive affect may in turn help solidify social attachment. Probably the most influential view of this sort was developed by Shaver et al. (1988), who portrayed romantic love as a kind of glue designed by nature to solidify the attachment between two adults whose interaction is likely to lead to parenting. In their view, love elaborates on sexual attraction in a way that will hold the couple together when their sexual intercourse leads to reproduction. Along the same lines, various studies have found that positive affective experiences increase attraction and solidify social bonds (L. A. Clark & Watson, 1988; Gouaux, 1971; May & Hamilton, 1980; Veitch & Griffitt, 1976). Moreland (1987) concluded that the development of shared emotions is one of the principal causes of the formation of small groups.

More generally, happiness in life is strongly correlated with having some close personal relationships. Research suggests that it does not seem to make a great deal of difference what sort of relationship one has, but the absence of close social bonds is strongly linked to unhappiness, depression, and other woes (e.g., Argyle, 1987; Freedman, 1978; Myers, 1992). People with high levels of intimacy motivation tend to enjoy higher levels of happiness and subjective well-being (McAdams & Bryant, 1987), which is likely a result of their tendency to form and maintain a rich network of friendships and other social bonds (McAdams, 1985). Having some intimate bond appears to be important and perhaps even necessary for happiness. Social isolation is practically incompatible with high levels of happiness.

*Negative affect.* Threats to social attachments, especially the dissolution of social bonds, are a primary source of negative affect. People feel anxious at the prospect of losing important relationships, feel depressed or grief stricken when their connections with certain other people are severed, and feel lonely when they lack important relationships (Leary, 1990; Leary & Downs, in press; Tambor & Leary, 1993).

Anxiety is often regarded as the extreme or prototype of negative affect, and it is clearly linked to damaged, lost, or threat-

ened social bonds. In fact, social exclusion may well be the most common and important cause of anxiety (Baumeister & Tice, 1990). Horney (1945) identified the source of "basic anxiety" as the feeling of "being isolated and helpless in a potentially hostile world" (p. 41); of course, that formula mixes two different sources, insofar as isolation is a function of the belongingness need, whereas helplessness is a frustration of control (which is probably another fundamental motivation). Anxiety and general distress seem to be a natural consequence of being separated from important others. Children as young as 1 year old show extreme distress—separation anxiety—on being separated from their mothers (Bowlby, 1973), and adults show similar reactions when they must leave loved ones for an extended period of time. Furthermore, people's memories of past rejections are tainted with anxiety (Tambor & Leary, 1993), and even just imagining social rejection increases physiological arousal (Craighead, Kimball, & Rehak, 1979).

Consistent with the social exclusion theory of anxiety, Barden, Garber, Leiman, Ford, and Masters (1985) found that anxiety ensues if people are excluded from social groups, but experiences of social inclusion appear to counteract the effects of exclusion and remove the anxiety. Mathes, Adams, and Davies (1985) predicted that a threat to self-esteem would mediate the link between jealousy and anxiety, but their results did not support their hypothesis. Instead, they found that the loss of relationship led directly to anxiety.

Like anxiety, depression may be precipitated by a variety of events, but failing to feel accepted or included is certainly one of them. Both general depression and social depression (i.e., dysphoria about the nature of one's social relationships) are inversely related to the degree to which one feels included and accepted by others (Tambor & Leary, 1993). Hoyle and Crawford (in press) found that both depression and anxiety were significantly correlated (negatively) with students' sense of belonging to their university.

Jealousy is another negative affective state that is a common response to threats to one's relationships. Pines and Aronson (1983) reported that, in a series of surveys, some experience of jealousy was essentially universal, in the sense that everyone experiences it sooner or later. Moreover, more than half of their respondents described themselves as being "a jealous person" and correctly estimated that slightly more than half of the other participants would respond in that same way; however, they also said that the true incidence of jealous people was even higher, because some jealous people deny their jealousy. Pines and Aronson emphasized that "feeling excluded" is a major cause of jealousy.

Regarding jealousy, perhaps the most relevant finding for our purposes was that of Reiss (1986), who concluded that jealousy is cross-culturally universal. Reiss carefully investigated the extravagant claims made by some observers and anthropologists that, in certain cultures, people are able to exchange sexual partners and intimate partners without any possessiveness or jealousy, and in every case the claim turned out to be unwarranted. Cultures may indeed vary as to which particular actions or signs of affection are regarded as justifying jealous reactions, and they may differ in how people express their jealousy, but sexual jealousy is found in all cultures.

Loneliness reflects "an individual's subjective perception of

deficiencies in his or her social relationships" (Russell, Cutrona, Rose, & Yurko, 1984, p. 1313). In other words, people feel lonely when their belongingness needs are being insufficiently met. Moreover, it appears that belongingness, rather than mere social contact, is the crucial factor. Mere social contact does not, by itself, buffer people against loneliness. Lonely and nonlonely people do not differ markedly in the amount of time they spend with other people. However, lonely people spend less time with friends and family—those who are most likely to fulfill their needs to belong—than nonlonely people (Jones, 1981). Furthermore, loneliness is much more strongly related to one's sense of social isolation than to objective indexes of one's social network, such as one's sheer number of friends (Williams & Solano, 1983). In one study, the correlation between self-reported loneliness and the degree to which people felt included and accepted by others was found to be  $-.71$  (Spivey, 1990). Generally, loneliness seems to be a matter more of a lack of intimate connections than of a lack of social contact (Reis, 1990; Wheeler, Reis, & Nezlek, 1983).

Yet another highly aversive emotional state is guilt. Despite a long tradition of analyzing guilt in terms of self-evaluation according to abstract moral standards, recent work has increasingly emphasized the interpersonal structure of guilt (Baumeister, Stillwell, & Heatherton, 1994; Cunningham, Steinberg, & Grev, 1980; Jones & Kugler, in press; Jones, Kugler, & Adams, 1995; Miceli, 1992; Tangney, 1992). Empirical studies of how people induce guilt in others have found that such inductions are almost entirely confined to close interpersonal relationships and that a major reason for inducing guilt is to cause one's partner to exert himself or herself more to maintain the interpersonal relationship (e.g., by spending more time with or paying more attention to oneself; Baumeister, Stillwell, & Heatherton, in press; Vangelisti, Daly, & Rudnick, 1991). Many episodes of guilt can thus be understood as responses to disturbances or threats to interpersonal attachments.

Two specific events that thwart people's need to belong are divorce and death. Divorce is not generally recognized as an occasion for joyful celebration, even if the divorce was desired more fervently than the wedding had been. Divorce produces varied forms of distress, including anger, depression, desolation, and loneliness, in nearly everyone. Weiss (1979) concluded that some "emotional upset . . . appears to be a nearly inevitable accompaniment to marital separation" (p. 210) and is found "even though [the] marriage had become unhappy" (p. 202). In contrast, Spanier and Casto (1979) and Goode (1956) did find a minority of participants who reported relatively little distress in response to divorce. Spanier and Casto (1979) thought that one possible explanation for the discrepancy was that their single interview technique (in contrast to Weiss's multiple sessions) was less sensitive to some deep or occasional feelings. Consistent with this, they concluded that certain forms of distress, such as regret, yearning, and bitterness, "actually may increase over time" (p. 226). Price and McKenry (1988) suggested another reason that one-time measures may fail to find universal distress after divorce: Many couples may have passed through the most distressing phase before the researchers collect their data.

Spanier and Casto (1979) listed the emotional turmoil after divorce as mixed from among

feelings about the (former) spouse, such as love, hate, bitterness, guilt, anger, envy, concern, and attachment; feelings about the marriage, such as regret, disappointment, bitterness, sadness, and failure; and more general feelings, such as failure, depression, euphoria, relief, guilt, lowered self-esteem, and lowered self-confidence. (p. 213)

Price and McKenry (1988) summarized the common emotional reactions to divorce as including "extreme stress, including feelings of rejection, depression, hostility, bitterness, loneliness, ambivalence, guilt, failure, confusion, disorganization, and sometimes relief" (p. 42). It is clear that plenty of negative affect accompanies divorce.

Perhaps the strongest emotional reactions human beings experience involve death, both the death of oneself and the death of other people. The death of a spouse, child, or close friend ranks among the most stressful events that people experience (T. H. Holmes & Rahe, 1967; Weiss, 1979). Grief often takes the form of an especially severe depression. Some conceptualizations of grief portray it not as a reaction to the loss of the person but as a reaction to the loss of a linkage with another person (Lofland, 1982). It is interesting that people even grieve deeply over the death of spouses with whom they had had troubled marriages. As Weiss (1979) observed, "Apart from minor variations, . . . nearly disabling grief was the rule, even among individuals who could say about the preceding marriage, as one widow did, 'Ours wasn't the best marriage in the world'" (p. 202).

Anxiety about death, whether of oneself or others, can be regarded as stemming (at least in part) from a threat to belongingness (Baumeister & Tice, 1990). As Lofland (1982) pointed out, when people die, relationships end. Along these lines, Conte, Weiner, and Plutchik (1982) linked death anxiety to fear of loneliness (see also Mijuskovic, 1980). In a study of death anxieties, Bednarski and Leary (1994) found that a primary basis of people's fears about death involved concerns with being separated from friends and family. These interpersonal concerns appeared to be a more important source of death anxiety than fears about no longer existing or uncertainty about what happens after death. This link between death anxiety and separation anxiety may explain why most positive depictions of life after death have emphasized togetherness with family and loved ones, with a broad community of like-minded believers, with a loving deity, or with all of the above (e.g., Baumeister, 1991). If death anxiety is rooted in threats to belongingness and social inclusion, then fears of death can best be soothed by emphasizing that death will involve a continuation or even an improvement in one's belongingness status.

*Indirect effects.* Although we have emphasized emotional consequences of changes in belongingness, there may also be indirect ways in which belongingness affects emotion. As shown earlier with cognitive processes, emotional processes may change when the situation involves a close friend or intimate partner. Tesser (1991) has reviewed a number of such effects. The main implication is that emotional responses to the relative outcomes of self and other depend heavily on whether the other person is a close relationship partner such as a good friend. When the performance involves a domain that is important to the self, it is upsetting to be outperformed by another person, and the emotional distress is magnified if the other person is a

close friend (see also Tesser, Millar, & Moore, 1988). In contrast, if the performance involves some ability that is not important to self-definition, then superior performances by friends (but not strangers) produce positive affect. One key difference is what Tesser (1991) called the reflection process: The positive achievements of one's relationship partners reflect favorably on the self (as long as they do not make the self look bad by comparison in some important way). Similar achievements by strangers do not reflect on the self, of course, and so they do not produce positive affect. Meanwhile, it appears that the positive accomplishments of close others in domains relevant to one's own identity have a special capacity to generate distress by threatening one's cherished views of one's own important abilities. Thus, the existence of a close relationship with another person changes the way one responds emotionally to that person's performance outcomes in complex but predictable ways.

*Critical assessment.* The evidence reviewed in this section was drawn from sociology, anthropology, and several subfields of psychology, and it is based on a variety of methods including surveys, observational studies, cross-cultural comparisons, autobiographical narratives, and experiments. Although several of these methods are generally regarded as less conclusive than experimentation, the consistency of the conclusion across multiple methodologies is itself a source of confidence. Thus, for example, one could dispute Pines and Aronson's (1983) determination about the pervasiveness of jealousy by noting that their sample was possibly skewed to include a high proportion of people who were interested in jealousy, but the very high (indeed, universal) incidence of jealousy across different cultures, as attested by Reiss's (1986) review, makes it seem unlikely that Pines and Aronson were wrong in concluding that jealousy is very common.

Probably the greatest ambiguity in this section's evidence attaches to the discussion of death. To be sure, it is implausible to dispute that emotional distress very typically attends the death of a loved one or relationship partner. Still, there are alternate explanations for this distress that could possibly dispense with the need to belong. A partner's death may have effects on material and pragmatic concerns (e.g., loss of income), may create distressing uncertainty about one's own future, may affect the self-concept, and may activate worries about one's own death.

*Conclusion.* Many of the strongest emotions people experience, both positive and negative, are linked to belongingness. Evidence suggests a general conclusion that being accepted, included, or welcomed leads to a variety of positive emotions (e.g., happiness, elation, contentment, and calm), whereas being rejected, excluded, or ignored leads to potent negative feelings (e.g., anxiety, depression, grief, jealousy, and loneliness). The near universality of distress associated with divorce and bereavement is consistent with the belongingness hypothesis; indeed, there is no firm evidence in those literatures that significant social bonds can ever be broken without suffering or distress, even though (as noted) not every recently divorced or bereaved person will necessarily be suffering acutely when the interviewer happens to call.

Although the evidence was not equally abundant or equally strong for all emotions, the consistency across multiple emotions was impressive. It seems quite safe to conclude that both

positive and negative emotional reactions are pervasively linked to relationship status. The existence of an interpersonal bond changes the way one responds emotionally to the performances and actions of a relationship partner and indeed intensifies many emotional reactions. Moreover, actual or possible changes in belongingness status constitute an important cause of emotions. The evidence is sufficiently broad and consistent to suggest that one of the basic functions of emotion is to regulate behavior so as to form and maintain social bonds.

### *Consequences of Deprivation*

The general argument is that deprivation of belongingness should lead to a variety of affiliative behaviors and cause various undesirable effects, including decrements in health, happiness, and adjustment. We have already documented (in the preceding section) that loss of social bonds causes emotional distress, which is sufficient to show that belongingness is something people want. To regard it as a need, however, it is necessary to show effects that go beyond mere frustration and emotional distress.

Considerable research shows that people who do not have adequate supportive relationships experience greater stress than those who do. In part, this is because having other people available for support and assistance can enhance coping and provide a buffer against stress. However, evidence suggests that simply being part of a supportive social network reduces stress, even if other people do not provide explicit emotional or practical assistance (Cohen & Wills, 1985). Although this finding has been interpreted in terms of the stress-reducing effects of social support, an equally plausible explanation is that the deprivation of the need to belong is inherently stressful.

Direct evidence that deprivation of belongingness is maladaptive was provided by DeLongis, Folkman, and Lazarus (1988). They found that happily married couples were less likely to experience psychological and somatic health problems, both on and after stressful days, than other participants. Medical research has suggested that these beneficial effects extend beyond mere health complaints. Lynch (1979) summarized the evidence from many studies by stating that "U.S. mortality rates for all causes of death . . . are consistently higher for divorced, single, and widowed individuals" than for married individuals (p. 38). Lynch's own data showed the greater incidence of fatal heart attacks among unattached individuals than among married people, but he noted that similar effects can be found for tuberculosis, cancer, and many other illnesses, as well as overall patterns. Of course, there are multiple possible explanations for such an effect that might have nothing to do with belongingness, but efforts to control for these variables have often found a persistent, independent, robust effect of social relations. Goodwin, Hunt, Key, and Samet (1987) found that married participants survived cancer better than single ones even after the timing of diagnosis, likelihood of receiving treatment, and cigarette smoking had been controlled, and they cited other evidence that the effect remains after family income has been controlled.

Indeed, being deprived of belongingness may have direct effects on the immune system. Kiecolt-Glaser, Garner, et al. (1984) found that loneliness was associated with a decrease in immunocompetence, specifically in natural killer cell activity, and this effect was independent of changes in perceived distress.

Kiecolt-Glaser, Ricker, et al. (1984) replicated this effect and also found elevated urinary cortisol levels among lonely participants. Kiecolt-Glaser et al. (1987) found poorer immune function on several measures among women suffering from marital disruption, including divorce, separation, and unhappy marriage.

The effects of belongingness on mental illness parallel those on physical illness. Rejected children have a higher incidence of psychopathology than other children (Bhatti, Derezotes, Kim, & Specht, 1989; Hamachek, 1992). Children who grow up without receiving adequate attention from caregivers show emotional and behavioral pathologies, as demonstrated experimentally by Harlow, Harlow, and Suomi (1971) with animals and as corroborated by observations of human children by Bowlby (1969, 1973; see also Rutter, 1979).<sup>4</sup>

Marital status also has strong correlations with mental illness. Bloom, White, and Asher (1979) reviewed the literature and concluded that, in all studies, mental hospital admission rates are highest among divorced and separated people, intermediate among never-married people, and lowest among married people. In fact, as measured by admissions to mental hospitals,<sup>5</sup> mental illness is at least 3 and possibly up to 22 times higher among divorced people than among married people.

Even problems that might at first seem unrelated to social interaction and relationships are sometimes found to have social deprivation or failed belongingness as an underlying cause. Problems with attachment have been identified as a major factor in eating disorders. Sours (1974), for example, noted that patients with eating disorders tended to have been (as children) overly sensitive to separation from their mothers. Armstrong and Roth (1989) found that women with eating disorders had significantly more intense and severe separation and attachment difficulties than a normal comparison group.

Combat-related stress is also moderated by belongingness. Veterans who perceive that they have a high degree of social support are significantly less likely to experience post-traumatic stress disorder than those who have lower perceived support (Hobfall & London, 1986; Solomon, Waysman, & Mikulincer, 1990). In fact, the authors of one study concluded that loneliness "is the most direct antecedent of psychopathology and social dysfunction" in combat stress reactions (Solomon et al., 1990, p. 468).

Crime may also be affected by belongingness. Sampson and Laub (1993) showed that having a good marriage and a stable job each had a strong negative effect on adult crime, consistent with other evidence. Other evidence suggests that social bonds to other criminals or to criminal groups may foster crime. Recent news coverage of gangs has repeatedly suggested that a need to belong attracts unattached young people to join violent gangs, which tend to serve as a surrogate "family" (Olmos, 1994; cf. Jankowski, 1991). Sampson and Laub likewise found that having social relationships with delinquent peers was one of the strongest independent predictors of juvenile delinquency, consistent with plenty of previous evidence. They did, however, caution that this well-established link is based on largely correlational data and that ambiguities about the direction of causality remain to be addressed. Still, for present purposes, the link is important evidence that belongingness needs are important among deviants, regardless of whether the link arises because

having delinquent peers causes delinquent activity or because delinquent activity leads to bonding with delinquent peers.

Meanwhile, in laboratory experimentation, Geis and Moon (1981) sought to involve participants in lying, cheating, and stealing at the behest of an assigned group partner (a confederate). They found that 67% of a sample of college students acquiesced in an act of cheating and in a monetary theft by their partner and that they actively lied to conceal the theft. Thus, it appears that even recently formed group bonds may be strong enough to overcome some salient prohibitions of traditional morality. (It is noteworthy that the group loyalty in that study may have been intensified by the presence of a hostile rival group.) More extreme versions of the phenomenon of going along with objectionable actions by fellow group members because of loyalty have been commonly observed as central factors in group violence, such as spontaneous atrocities committed by the Ku Klux Klan (Wade, 1987), Nazi police guards (Browning, 1992), and others (Staub, 1989; see also Groth, 1979, on gang rape).

The relevance of belongingness to suicide was suggested nearly a century ago by Durkheim (1897/1963). His seminal work proposed that suicide could be explained as a result of a failure of social integration. People who are well integrated into society by multiple and strong relationships are unlikely to commit suicide, whereas unintegrated people are much more likely to kill themselves. Durkheim's hypothesis has held up far better than most social science hypotheses over the decades, and the evidence continues to show that a lack of social integration increases the likelihood of suicide (Trout, 1980). For example, single, divorced, and widowed people are more likely to commit suicide than married people (e.g., Rothberg & Jones, 1987). Those who are unemployed have a higher suicide rate than those who are employed. People who belong to subcultural groups that are shrinking have increased suicide rates. People who work in occupations that are shrinking are also more likely than others to commit suicide. Indeed, the main criticism that can be leveled against Durkheim's hypothesis is that it is incomplete in the sense that it does not explain everything about suicide (e.g., Baumeister, 1990; Douglas, 1967), but it is correct as far as it goes. For present purposes, the important point is that strong social ties are associated with a lower risk of suicide, probably because such ties help restrain people from killing themselves.

Social support research is relevant to the belongingness hypothesis because social support is based on relationships and

<sup>4</sup> Several studies have shown that physically unattractive people have a higher incidence of psychopathology than attractive people (e.g., Barocas & Vance, 1974; Cash, 1985; Farina, Burns, Austad, Bugglin, & Fischer, 1986; O'Grady, 1989). One reason may be that they lack belongingness, because society tends to reject unattractive individuals (Berscheid & Walster, 1974).

<sup>5</sup> Admittedly, hospital admissions is an imprecise measure. One might object that married people can stay out of institutions because they have someone at home to take care of them. On the other hand, many people are admitted to such institutions at the behest of family members, and so one could argue that the true difference is even larger. Given the size and consistency of the effect, it seems reasonable to conclude that marital status is related to mental illness, although further and methodologically better evidence is needed.

positive interactions with others, and so any benefits of such support would constitute further confirmation of the belongingness hypothesis. The benefits of social support appear to be well established. Thus, for example, Cohen, Sherrod, and Clark (1986) showed that the availability of social support—which can be restated as the existence of social bonds—buffers people against the ill effects of stress. Cutrona (1989) showed that social support reduced depression during pregnancy and postpartum depression among adolescent girls. Responding to methodological criticisms that had attacked social support research as merely self-report bias, Cutrona's study included ratings of each girl's support network by an adult informant who knew the girls well, and these external informants' ratings predicted health outcomes (in some cases, even better than the girls' own ratings of their support). Thus, the benefits of belongingness in coping with major life stress appear to go beyond mere self-report bias.

Older adults who have a close, intimate friend (i.e., a "confidant") maintain higher morale in the face of life stresses such as retirement and spousal death than individuals who lack such a relationship. For example, Lowenthal and Haven (1968) found that widows who have a confidant have been found to be only slightly more depressed than married women, whereas those without a confidant have been found to be much more dysphoric. These researchers also found that the majority of older adults who recently lost a confidant were depressed, but the majority who currently had a confidant were satisfied.

Rook (1987b) distinguished between social support and companionship. Social support was in this case rather narrowly interpreted in terms of direct help, whereas companionship meant the expressive aspects of social interaction. Both were found to be important and beneficial, but companionship may be the more important of the two, especially for psychological well-being, social satisfaction, and coping with minor stress. These data are particularly important for the relevance of social support research to the belongingness hypothesis because one could conceivably argue that belongingness per se is irrelevant and that the practical, material help that people derive from their social networks is solely responsible for the benefits of social support. Rook's data suggested, on the contrary, that the practical help is secondary (except in extreme circumstances in which major assistance is needed), whereas belongingness is highly beneficial by itself.

Perhaps most generally, general well-being and happiness in life depend on having some close social ties. Social isolation is strongly related to various patterns of unhappiness (for reviews, see Argyle, 1987; Baumeister, 1991; Freedman, 1978; Myers, 1992). Indeed, Baumeister (1991) noted that it is about the only objective factor that shows a substantial correlation with subjective well-being. Happiness also appears to be fairly stable across time and circumstance (e.g., Costa, McCrae, & Zonderman, 1987), leading many to conclude that it is linked to personality factors. The broad trait of extraversion appears to be strongly related to happiness and positive affectivity (see Costa & McCrae, 1980, 1984), and extraversion encompasses several factors, such as sociability, gregariousness, warmth, and social involvement, that seem likely to enhance the tendency to form and maintain social ties. Moreover, belongingness appears to be sufficient to overcome the relative deficit in happiness that introverts suffer. Hotard, McFatter, McWhirter, and Stegall

(1989) found that introverts who have a good network of social relationships are just as happy as extraverts. Thus, introverts' deficit in happiness may be a result of their experiencing less belongingness.

Further support for the importance of belongingness to psychological well-being is provided by the fact that the psychotherapeutic process is facilitated by close personal bonds. Numerous therapeutic orientations stress the importance of the relationship between the therapist and the client. Rogers (1959), for example, urged psychotherapists to display a willingness to accept and support the client regardless of his or her behavior or contribution to the relationship. Such "unconditional positive regard" is perhaps the ultimate way to fulfill another person's belongingness needs. From the standpoint of the belongingness hypothesis, however, the essential ingredient in client-centered therapy is not unconditional positive regard (i.e., appraisal) but unconditional social acceptance (i.e., belongingness).<sup>6</sup>

Furthermore, some have suggested that one goal of psychotherapy should be to enhance clients' ability to elicit social support in their everyday lives (Brehm, 1987). To the extent that people who have strong connections with others are happier, healthier, and better able to cope with the stresses of everyday life, most clients would presumably benefit from enhancing their belongingness.

The psychotherapeutic usefulness of belonging can also be seen in the effectiveness of group therapy. As Lewin (1951) flatly stated, "It is easier to change individuals formed into a group than to change them separately" (p. 228). In part, the effectiveness of group therapy seems to depend on engendering a sense of belongingness, as some authors have asserted (Larkin, 1972; Yalom, 1985). Forsyth (1991), in his review of research on group therapy, observed that therapeutic groups provide the member "with a sense of belonging, protection from harm, and acceptance" (p. 675).

People differ, of course, in the degree to which they believe that their belongingness needs are being met irrespective of the extensiveness of their social networks or the strength of social support they receive. Lakey and Cassady (1990) provided data suggesting that perceived social support operates much like a cognitive schema. People have relatively stable, organized beliefs about the extent and quality of their interpersonal relationships. These belief systems lead to biased interpretation of social interactions, as well as to a biased recall of past interpersonal events. As a result, some people have a predisposition to perceive others as unsupportive, leading them to experience belongingness deprivation even when others are in fact being supportive.

*Critical assessment.* The diversity of methodologies and the multiplicity of disciplines that have furnished the evidence reviewed in this section make it highly implausible to suggest that all such evidence can be explained away as the result of confounds or artifacts. At worst, some of the findings have alternate explanations. Not all studies have maintained careful distinctions between the pragmatic benefits of certain relationships and the direct benefits of belongingness. The fact that happily

<sup>6</sup> The two overlap in many ways, of course. Cutrona (1986) has noted that esteem support is an important element of social support, particularly for helping people avoid depressive reactions to stressful events.

married people commit fewer crimes than other adults, for example, might be partly (or even wholly) due to the material benefits of being married. Even so, researchers who have maintained such distinctions (such as several of the social support researchers) have found pragmatic benefits to be a secondary factor. Belongingness thus has important and direct benefits.

A more serious limitation is that several of the findings are correlational. The higher rates of mental and physical illness among loners could reflect a tendency for people to reject deviants as potential relationship partners. By the same token, the higher levels of life satisfaction found among happily married people could be partly due to a tendency for chronically unhappy people to be rejected as marriage partners. Still, those studies that have provided evidence about the direction of causality have consistently identified belongingness as the causal factor.

*Conclusion.* Deprivation of stable, good relationships has been linked to a large array of aversive and pathological consequences. People who lack belongingness suffer higher levels of mental and physical illness and are relatively highly prone to a broad range of behavioral problems, ranging from traffic accidents to criminality to suicide. Some of these findings may be subject to alternative explanations, and for some the direction of causality has not been established; however, the weight of evidence suggests that lack of belongingness is a primary cause of multiple and diverse problems. It therefore seems appropriate to regard belongingness as a need rather than simply a want.

#### *Partial Deprivation: Relatedness Without Interaction*

We have proposed that the need to belong has two aspects: People require frequent interactions with the same person, and people want a stable, enduring context of concern and caring. This section examines some instances in which people have the first of these while being deprived of the second, and the next section examines the opposite case. These cases are important for establishing whether the need to belong does indeed involve both aspects. To confirm this version of the belongingness hypothesis, a rather precise pattern of comparisons is needed, one based on the assumption that satisfying only one of the components should bring only partial satisfaction. People with only one of the two components should presumably be slightly better off than people who have neither, but they should be worse off than people who have both.

One example of relatedness without interaction involves people in prison. Many prisoners have families or loved ones on the outside, but interactions with them are severely restricted. Although systematic, quantitative data are scarce, works on prison life appear to be in emphatic agreement that prisoners treasure and cling to these ties yet suffer greatly over the lack of interaction (Baunach, 1985; Isenberg, 1991; Toch, 1977). At least some efforts at prison reform and the cultivation of alternatives to standard imprisonment emphasize that increasing contact with family members is beneficial to the prisoner (Scudder, 1952). Toch (1977) documented the extensive anguish suffered by prisoners over lack of contact with family and romantic partners, although he noted that the perceived threat of losing the bond was often a source of suffering, which suggests

that the deprivation of interaction is not fully responsible for the distress.

One group that might be relatively immune to this fear would be imprisoned mothers, insofar as mother-child bonds cannot be broken through divorce or other mechanisms (unlike romantic ties and friendships). Baunach (1985) and Giallombardo (1966) both reported that imprisoned mothers lamented the loss of interaction with their children and used every available means to maximize contact. They noted that these efforts were especially impressive in that both the prison institution and the collective wisdom of the prison subculture stress the need to suspend all emotional interest in events outside the prison, because such concerns produce frustration and helplessness. Thus, these women's efforts to maintain such ties are opposed by pervasive situational pressures, but they remain strong anyway, suggesting that the bonds continue to offer satisfaction of some powerful need despite the effort and frustration involved in maintaining them.

Noncustodial divorced parents represent another group restrained from interacting with their children. Wilbur and Wilbur (1988) observed that most such parents refused to accept that the bond to their children was severed or even damaged, even when their lawyers advised them to abandon efforts to continue the relationship. Thus, the bond is apparently very important to these parents even if it is mainly associated with frustration, aggravation, and disappointment. Meanwhile, the lack of interaction and contact with the children was often very upsetting to these noncustodial parents, and indeed most of the dilemmas that Wilbur and Wilbur associated with noncustodial parenthood revolved around a lack of contact and interaction.

Children of divorce are often in a similar position of losing interaction access to the noncustodial parent. R. Rosen (1979) found that children who had free, unlimited access to interact with the noncustodial parent were least likely to perceive the divorce as traumatic, although that finding was based on correlational data and both variables (access and trauma) could have been confounded with how well the parents got along with each other after the divorce. Rosen also found that most children expressed a clear preference for such free access to the noncustodial parent, and a large minority indicated that they had less contact than they wanted to have with that parent. Thus, even if the relational bond continues to exist, many children seem to suffer from the reduction in interaction. A later study by Drill (1987) concluded strongly that most children want to maintain the bond despite the reduced interaction. Drill observed that children of divorce were most prone to depression if they perceived the noncustodial parent as being lost, in the sense of having the bond severed. Fortunately, most children apparently perceive the bond to remain in existence, which presumably accounted for Drill's finding that children of divorced parents were no more likely overall than children of non-divorced parents to be depressed.

Weiss (1973) reported that housewives who had recently moved to the Boston area often reported loneliness despite having a strong marital bond. They were lonely because they were deprived of interactions most of the time: They had no local friends, and their husbands were away all day and preoccupied with their new jobs. Hoyle and Crawford (in press) found that students' sense of belonging to their university involved more



than mere identification with the institution; it also had a strong component of behavioral involvement. This sense of belonging was heavily correlated (.65) with their involvement in university activities, suggesting that daily interactions are an important part of belongingness. Although alternative explanations for these findings cannot be ruled out, the findings are consistent with the general pattern that a bond alone is not enough to satisfy the need to belong.

Long-distance relationships and commuter marriages offer another set of circumstances in which people have an interpersonal bond but are relatively deprived of interaction. Gerstel and Gross (1982) observed that people cling to these relationships, which suggests that they are positively valued and provide some rewards, but also find them stressful, consistent with the view that relationship without interaction is less than fully satisfactory. Similarly intermediate results were reported by Goverts and Dixon (1988): Commuters did not show any significant drop in overall marital satisfaction, but they did express dissatisfaction with time spent together and affectional communication. Gerstel and Gross found that the stressful aspect of commuter marriage was significantly reduced by regular weekend visits; thus, the opportunity for regular and fairly frequent interactions was very beneficial (see also Holt & Stone, 1988). They also found that couples who had been married longer and therefore had a greater sense of stability suffered less from the stress of separation than other commuter couples, presumably because they could remain more secure and confident that the attachment to the spouse would survive. Thus, these people have a solid bond but still express a strong need for interactions.

In a later work, Gerstel and Gross (1984) reported that commuter couples valued the bond but suffered over the loss of interaction. Couples seemed to find it ironic that small talk over trivial matters would turn out to be something they missed, but as Gerstel and Gross noted, these seemingly insubstantial interactions are believed to be an important aspect without which the marital bond is not fully satisfactory or fulfilling. Frequent (long-distance) telephone conversations were a common but not fully satisfactory solution to the deprivation of interaction. Respondents in that study noted that telephone conversations seemed adequate for sharing information and discussing practical affairs but were frequently deficient for producing pleasant social interactions or enjoying one another's company. This suggests that regular interactions do have something to offer that is not contained in merely knowing that the social bond exists and exchanging information. In addition, loss of shared leisure activities was a common complaint.<sup>7</sup>

Winfield's (1985) study of commuter marriages confirmed many of Gerstel and Gross's (1982, 1984) conclusions. In addition, Winfield found a surprisingly low rate of sexual infidelity (see also Gerstel & Gross, 1984) and concluded that married people who live apart are, ironically, only about half as likely to be unfaithful as married people who live together (despite the presumably much greater opportunity and temptation). She cited commitment to the relationship as an important reason for this increased fidelity, and so it reflects on how these people value the social bond. Still, it was clear that many couples suffer and feel deprived because of the lack of interaction, and Winfield observed that loneliness was a frequent problem. A similar point was made by Bunker, Zubek, Vanderslice, and Rice

(1992), who found that commuting spouses were less satisfied with their marital relationship, family life, and overall quality of life than were spouses who lived together. For present purposes, the implication is that the bond to an absent spouse appears to furnish some positive benefits and satisfactions, but people still suffer over the lack of contact. The evidence from commuter marriages thus appears to confirm the importance of two separate components of belongingness, namely the secure confidence in an enduring bond of mutual caring and the regular experience of pleasant, affectively positive interactions.

Similar findings have emerged from studies of the spouses of military personnel. Several articles on the wives of submariners have shown that these women suffer anxiety, depression, and physical illness during the long absences of their husbands (K. Beckman, Marsella, & Finney, 1979; A. I. Snyder, 1978; see Harrison & Connors, 1984, for a review). Pearlman (1970) observed that each departure typically involved a crisis.

*Critical assessment.* Evidence from multiple fields and seemingly quite different populations points to the same conclusion about the need for interactions. All of the studies can be criticized on methodological grounds, however. The prison samples may be atypical and pathological. Commuters may be atypical because of having chosen to live apart (although the fact that they still suffer from the deprivation despite this choice would seemingly strengthen rather than weaken the argument that frequent interactions are needed). The observations about children of divorce seem less tainted by such concerns, but it may be difficult to disentangle the multiple causes of distress. The spouses of military personnel may be most representative of the population at large. A further problem is that most of these studies have used samples of convenience rather than systematically created ones. For prisoners in particular, and in some of the studies of other groups, the data are largely observational and impressionistic, and it would be much better to have quantified comparisons with well-chosen control groups.

Alternative explanations also plague the prison studies. Prisoners derive practical benefits from maintaining contact with people outside the prison who can bring them material goods and do them favors (Isenberg, 1991). As already noted, some of the concern about lack of contact with loved ones may reflect a fear of losing the bond, so it is not safe to regard prisoners as a pure example of people who have a stable bond but lack interactions. To some extent, this problem can be rectified by considering mothers, who should be less worried about being abandoned by their children; in some cases, however, they too fear that the child will bond with someone else and become estranged from them (Baunach, 1985), so it may be appropriate to regard this fear as merely reduced, not eliminated, among them. Baunach (1985) also noted that it is impossible to rule

<sup>7</sup> One might wonder whether sexual deprivation was responsible for the problems reported in commuter marriages. However, studies of these couples indicate that most see each other a couple of days each week, which in principle would be sufficient for the approximately weekly sexual intercourse that is the norm among married couples. Gerstel and Gross (1984) found that most of these couples had had sex only on weekends even when they lived together, so there was little decline in sexual frequency as a result of commuting; most couples reported that their sex lives were basically the same after they started commuting.

out the alternative explanation that some imprisoned mothers' displays of concern for their children are feigned ploys to impress the parole board.

The growing literatures on commuter marriages and filial attachments to divorced, noncustodial parents are less subject to alternative explanations than the prison studies, but they too are far from controlled, prospective studies that conclusively demonstrate causal effects. There have been attempts to study direct effects of frequency of interaction independent of pragmatic and other benefits. Most of the findings are still correlational, but on a priori grounds it seems implausible to suggest the reverse causal hypothesis (e.g., that unhappiness over lack of interaction causes people to spend less time together).

Despite these concerns, the convergence across different groups and methods is encouraging. At present, it seems appropriate to accept the converging conclusions from these studies, at least until contrary evidence is found.

*Conclusion.* Broad and consistent but methodologically weak evidence supports the conclusion that having a relationship without frequent interactions offers only partial, incomplete satisfaction of the need to belong. Researchers have studied several different circumstances in which people find themselves having relationships without interactions, and in each case the same conclusion has emerged: People with such bonds do seem to treat them as desirable and valuable (consistent with the view that they do offer some rewards) but suffer over the lack of direct contact with the other person.

#### *Partial Deprivation: Interaction Without a Bond of Caring*

Interaction without an ongoing bond of caring should also be only partly satisfactory. Two predictions can be made. First, insofar as the need to belong requires that some interactions reflect a relationship context, it can be predicted that interactions with changing series of partners should be less than satisfying. Second, if the interactions are supposed to reflect the context of positive emotional concern, then people should not be satisfied by interactions within the context of an ongoing relationship or social bond that is not marked by positive caring. We look for evidence for the specifically mutual nature of the bond.

*Need for relatedness.* Can people be satisfied by frequent interactions without stable relationships? Weiss (1973) observed that "loneliness is not simply a desire for company, any company; rather it yields only to very specific forms of relationship" (p. 13). Wheeler et al. (1983) showed that loneliness is largely independent of one's amount of social contact, thereby confirming Weiss's observation. In the next section of this article, we cover several studies showing that people seem to prefer a few close friendships over a high number of transient or superficial encounters and that evidence could be taken to indicate that the relationship bond is essential to full satisfaction.

One possible population of people who have many interactions without the bond of mutual caring would consist of prostitutes, who may have a high frequency of physically intimate interactions with partners with whom there is no ongoing bond. Sure enough, prostitutes often describe their occupation as having the benefits of meeting interesting people and not being as

boring as other jobs (e.g., McLeod, 1982, p. 31). If intimate interactions were sufficient to satisfy social needs without any lasting bond, prostitutes might be very happy and well adjusted. On the contrary, however, it appears that prostitutes are far from satisfied by these interactions and instead seek and cultivate lasting bonds with others. The desire for bonds of mutual caring is apparently often responsible for irrational, even self-destructive attachments to procurers and other men (Adler, 1980; McLeod, 1982; Symanski, 1980). Also, many prostitutes are single mothers, and the bond with the child is very important (McLeod, 1982). Several signs indicate that prostitutes do like to cultivate long-term relationships with clients, as evidenced by some brothel rules designed to prevent the formation of such attachments (Symanski, 1980). Indeed, Symanski (1980) calculated that prostitutes would maximize their financial earnings by working in brothels and serving the most customers, yet many specifically objected to the procedures involving many brief contacts and sought to work in other settings where they could have more time with each client and cultivate repeat customers. These observations must be regarded as tentative, however, because the studies lack methodological rigor.

*Bond of caring.* The next issue is whether all relationship bonds can satisfy the need to belong. It appears that only bonds marked by positive concern and caring offer satisfaction. Even if a person has both an enduring bond and frequent interactions, he or she may feel that the need to belong is not fully satisfied. We turn now to relevant evidence involving cases in which the person is firmly linked to others but has unpleasant or unsatisfying interactions with them.

Earlier, we listed a series of apparent benefits of social bonds for health, adjustment, happiness, and general welfare. There is an important qualification, however. In many cases, it is not the mere fact of having an interpersonal attachment, but rather having an attachment that brings positive interactions, that is decisive. Relationships marked by conflictual interactions are much less beneficial and sometimes harmful. DeLongis et al. (1988) found that happily married people were much healthier than were people in unsupportive social relationships. Thus, it is not the mere fact of marriage, but rather having a supportive marital relationship, that provides health benefits, and people who are deprived of such a satisfying relationship are more vulnerable. Coyne and DeLongis (1986) reviewed evidence and concluded that bad marriages may be worse than being alone in terms of effects on happiness and health. Kiecolt-Glaser et al. (1987) found decrements in immune function among unhappily married women and among women who were separated from their husbands while remaining emotionally attached to them. Myers's (1992) review of the literature on happiness concluded that whereas good marriages provide a powerful boost to happiness, bad marriages lead to extreme unhappiness. Likewise, research on social participation by Reis, Wheeler, Kernis, Spiegel, and Nezelek (1985) found that the quality rather than the quantity of social interactions predicted health. Specifically, participants (particularly women) who had better quality interactions (defined in terms of intimacy, pleasantness, satisfaction, mutual disclosure, initiation, and influence) fared better on a variety of measures of physical and mental health.

Although the lack of a good marital relationship appears to be detrimental to mental health, the existence of a bad marital

relationship is arguably worse. Having a spouse or close partner may preclude the person from seeking other, more satisfying and beneficial relationships, and the pervasive and salient conflictual interactions may intensify the person's feeling of not belonging. Thus, to complement the standard finding that good social support is beneficial for mental health, Vinokur and van Ryn (1993) showed that *social undermining* (i.e., conflict, criticism, making life difficult, and inducing feelings of being unwanted) in close relationships has a strongly negative effect on mental health. Indeed, in their sample of unemployed people, the effect of social undermining was stronger than the effect of social support. Carnelley, Pietromonaco, and Jaffe (1994) confirmed the link between problematic relationships to parents and subsequent depression, and they also found that the current romantic involvements of depressed adults tended to be characterized by fearful avoidance and anxious ambivalence. Although their results are correlational, they are quite consistent with the view that problems and deficiencies in close relationships contribute to depression (with attachment style as a mediating variable).

We also mentioned Sampson and Laub's (1993) finding that linked marriage and job involvement to reduction in criminal activity. These reductions in crime were limited to people who had good, stable, happy marriages and who were employed in steady jobs. (The marital and job effects were independent.) In contrast, the mere fact of being married, or the level of one's income, had no relation to crime. Thus, being well integrated into good relationships, rather than merely having a social attachment, reduces criminality.

Also relevant are studies on how a good marital relationship affects offspring; indeed, for evolutionary analyses, these investigations may be especially important. Several reviews have concluded that conflict between parents leads to aggressive, antisocial behavior (such as juvenile delinquency) and perhaps other behavior problems in children (Belsky, 1981; Emery, 1982; Rutter & Garnezy, 1983). Indeed, Emery (1982) concluded that parental conflict, rather than separation, is the main factor responsible for the bad effects of divorce on children, because the problems covary much more closely with conflict (in either intact or separated parents) than with separation. Recent work indicates that a good marital relationship tends to cause greater warmth toward the children, which in turn reduces angry and defiant misbehavior on the part of the children (N. B. Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993; see also Belsky, 1979).

*Mutuality.* The last issue concerns how important it is that caring, concern, and affection be mutual and reciprocal. One can well understand why people are better off to interact with partners who care about them, because the partners might provide more material rewards and other benefits. But is there any value to caring about the other person, as opposed to being merely cared about?

In the first place, it does appear that mutuality is the norm. M. S. Clark et al. (1987) showed that the desire to receive help from others was correlated with the desire to give help and respond to others' needs. This suggests that the desire for communal relationships is based partly on the appeal of a framework in which people have mutual concern for each other's welfare. The alternative explanation for Clark et al.'s findings would be

based on social exchange theory, which would propose that people might prefer to be involved in one-way relationships, so that they would receive the benefits of the other person's care but not incur the costs of having to care for the other person. Perhaps mutuality is the norm only because people cannot find others who will care for them without getting anything in return. The evidence runs contrary to this view, however, despite its economic and utilitarian logic. Hays (1985) examined relationship satisfaction as a function of the costs and benefits to the individual. From a behavioristic standpoint, he predicted that satisfaction would be predicted by an index of the rewards minus the costs, which is precisely what economic rationality would favor. Contrary to that prediction, however, Hays found that satisfaction was much better predicted by an index of rewards *plus* costs. In other words, people preferred relationships in which both parties gave and received care.

Mutuality seems to improve and strengthen the relationship. Rusbult, Verette, and Drigotus (1994) found that mutuality of commitment predicted good marital adjustment. This effect was independent of the actual level of commitment, which shows that mutuality per se is indeed beneficial. The other side of this was demonstrated by Hill, Rubin, and Peplau (1976), who showed that unequal involvement was a strong predictor of romantic breakup. Moreover, it was not simply the case that the less involved partner was more likely to break off the attachment, because in many cases the more involved person initiated the breakup. Only when both partners reported that both were equally involved was the couple likely to still be together 2 years later.

If mutuality is good for relationships, it is also good for individuals, as indicated by recent findings from studies of unrequited love (Baumeister & Wotman, 1992; Baumeister, Wotman, & Stillwell, 1993). These studies compared people who received love without giving it and people who gave love without receiving it. To the researchers' surprise, both groups tended to describe the experience as aversive. Apparently, love is highly satisfying and desirable only if it is mutual.

The parent-child bond is inevitably asymmetrical, insofar as the child cannot provide the parent with the nurturant care and concern that the parent must provide the child. If there are any exceptions to the principle that mutuality is optimal, they would presumably be found among parents. The difficulty, of course, is determining what is the appropriate comparison. One strategy would be to compare mutual and nonmutual two-person families, that is, compare families consisting only of two adults (i.e., childless marriages) and families consisting only of a parent and child (i.e., single parents). Research has abundantly shown that those two types of families differ dramatically in terms of happiness (of the adult): The childless spouses are happier than average, and the single parents are less happy than average. In other words, if an adult woman is to have only one other person in her family, she will be happier if this person is a husband rather than a child (e.g., S. A. Anderson et al., 1983; Baumeister, 1991; Bernard, 1982; Campbell, 1981; Campbell et al., 1976).

One reason for the importance of mutuality may be trust. J. G. Holmes and Rempel (1989) reviewed evidence that trust is often a crucial and influential feature of good, beneficial, and satisfying relationships and concluded that trust depends

heavily on mutuality, especially the mutual recognition of reciprocal concern and attachment. Dissimilar feelings and unequal involvement prevent the growth of trust and thereby thwart or weaken relationships.

*Critical assessment.* The evidence in this section was uneven in quality and quantity. We have found no methodologically rigorous evidence indicating that frequent interactions without an ongoing relationship offer partial or intermediate satisfaction of the need to belong. The prostitution studies were merely correlational and impressionistic, and, even if they had been based on systematic samples of prostitutes (which they were not), one would be reluctant to generalize from prostitutes to the rest of the population.

In contrast, the evidence is stronger with regard to the inadequacy of negative or conflictual interactions to provide satisfaction. Although much of this evidence is correlational, there is some time-sequence evidence suggesting that unhappy marriages and other problematic relationships lead to distress and illness.

The evidence for mutuality is scattered and fragmentary, although it is consistent. Most of it is somewhat indirect. Further research is needed to provide direct evidence about the importance of mutuality, particularly whether one's own caring for the partner is important for satisfying one's own need to belong.

*Conclusion.* First, there is some evidence that interactions with a changing series of partners, without any ongoing relationship bond, fail to satisfy people, but this evidence is suggestive rather than conclusive. Second, several studies have indicated that problematic or unhappy marriages fail to produce the benefits normally linked to belongingness and, in fact, may make things worse. Thus, the mere fact of a social bond is not enough to protect people from these problems and pathologies. Rather, it appears that people require their primary social bonds to be characterized by affectively positive interactions that signify the other's affectionate concern. Third, there are several indications that people prefer relationships marked by mutual, reciprocal concern, but stronger and more direct evidence is needed. It is also plausible that mutuality is merely a preference rather than a need.

### *Satiation and Substitution*

The belongingness hypothesis holds that individuals need a certain amount of social relatedness. Social relationships and partners should therefore be to some extent interchangeable. Moreover, people who have sufficient social bonds to satisfy the need to belong should be less interested in forming additional relationships than people who do not already have sufficient bonds. These corollaries of the belongingness hypothesis can be expressed in terms of satiation and substitution. *Satiation* refers to the diminished motivation that ensues when the need to belong is already well satisfied, and *substitution* refers to the replaceability of one social bond with another. Satiation and substitution are not unrelated, of course, because both invoke the basic assumption that people need a certain quantity of belongingness, and attachments or interactions beyond that minimum should be subject to a pattern of diminishing returns.

Satiation implies a diminishing returns principle in the pursuit of new relationships and partners. Even in people-rich en-

vironments such as colleges, people appear to restrict their social lives to some extent. Studies show that the vast majority of the average student's meaningful interactions are with the same six people (Wheeler & Nezlek, 1977). Reis (1990) surveyed students about their interpersonal goals, and although "having lots of friends" received one of the lowest ratings, most of the top-rated items referred to intimate sharing with a few close, caring friends. Caldwell and Peplau (1982) found that a strong majority of both men and women expressed a clear preference for a few close friendships over a large number of good but less intimate friendships. Thus, people appear to devote their time and efforts toward deepening a limited number of relationships rather than toward meeting ever new people or cultivating a wider range of acquaintanceships. Consistent with the satiation hypothesis, people seem to believe that, in terms of friendships, quality (closeness) is far more important than quantity.

Audy (1980) suggested that this satiation is more or less essential if a species is to survive. Organisms evolve a "limited requirement for the frequency of social transactions and a corresponding optimum group size" that permit a maximum of social gratification balanced by socially induced frustration (pp. 123-124). As he noted, there is evidence that people have evolved "a physiological structure and basic mental requirements suited to a particular group size that corresponds to [their] need for a certain level of social transactions" (p. 124).

Satiation patterns, in the form of diminishing effects of social approval as reinforcement, have also been investigated in the context of learning theory. Gewirtz and Baer (1958) replicated the standard pattern that children's task performance would improve in response to verbal approval reinforcers such as praise and other approving remarks; moreover, the reinforcement effect was intensified if the children had first been deprived of social approval by being kept in isolation for a brief period. In another condition, however, the children were first given an interview in which they received praise and admiration for whatever they said about themselves. After this interview, the standard praise and approval remarks failed to elicit improvements in task performance, which suggests that these participants had been satiated with approval and were unaffected by further doses. Eisenberger (1970) reviewed the subsequent studies on the same topic and found that the initial results were well replicated. Moreover, these effects were not a result of sensory deprivation, and they also failed to alter the subsequent responsiveness to nonsocial rewards. Eisenberger concluded that social deprivation and social (approval) satiation effects operated by altering short-term motivation for obtaining approval. Although these studies were generally conducted with children and did not involve lasting relationships, they do indicate that the motive to gain social approval is susceptible to satiation.

Social interaction patterns that accompany the formation of an intimate romantic relationship are especially relevant, because both satiation and substitution are implicit. Milardo, Johnson, and Huston (1983) found that as an intimate relationship develops, people reduce the amount of time they spend interacting with other people, including old friends. Thus, the romantic relationship appears to supplant the others and satisfy the belongingness need previously satisfied by the other friendships.

The belongingness hypothesis is, of course, not limited to the

mere existence of some formal attachment but also depends on the quality of the relationship. Consistent with this, Berman's (1988) research on attachment to ex-spouses found that the positive qualities of the relationship were important determinants of the distress over the loss, as indicated by the finding that people who had more favorable memories of the marriage also had more distress after it ended. For present purposes, the important implication is that if bad marriages fail to satisfy the need to belong, then, as a result, they should stimulate a search for new attachments. Vaughan (1986) observed that when marriages begin to develop significant problems that will eventually lead to their dissolution, the individuals often begin to seek out new friendships and relationships. Along the same lines, Lawson's (1988) research on adultery found evidence that substitution can be an important factor, particularly for women. She found that the reason most commonly cited by women for engaging in extramarital sex was the husband's failure to satisfy the wife's intimacy needs. (For husbands, other factors such as sexual novelty and variety were influential, but these factors are irrelevant to the belongingness hypothesis.) The implication is that when the marital relationship satisfies the need to belong, women are unlikely to seek extramarital relationships, but when the marriage is not satisfactory, extramarital substitutes may be sought. This conclusion supports both the satiation and substitution hypotheses.

Spanier and Casto (1979) found that most people relied heavily on (and benefited from) social support from friends and family during divorce. When friends and family were not supportive, however, "this lack of support seemed to increase the overall difficulties in adjusting to the separation, especially the emotional adjustments" (p. 217). Spanier and Casto also noted that a failure to make new friends made the adjustment worse. In a direct test of the hypothesis that more social interaction will lead to less adjustment problems after divorce, they found a strong relationship between social activity and adjustment problems. They also found that forming new heterosexual or romantic relationships eased the transition of divorce and led to far fewer difficulties of adjustment. When new relationships fail to form, the emotional distress associated with the divorce and the ex-spouse may actually increase rather than decrease over time (Spanier & Casto, 1979, p. 226), which again implies that substitution is an effective way of recovering from relationship dissolution. A very different source of evidence for the same conclusion is Bowlby's (1969, 1973) observation that children's anxiety and distress over separation from the mother seemed to be greatly reduced if the children were accompanied by a familiar other person at that time.

Populations of old people offer a useful way to examine progressive social deprivation, because in many cases old people have retired from work, are losing spouses to death, and cease to make new intimate friendships (e.g., Kaufman, 1986). Like Kaufman, L. J. Beckman (1981) found that old women's relationships to adult children had become increasingly important to their lives. The happiness of old women with children was unrelated to the amount of social interactions with other people; among childless old widows, however, happiness in life was significantly correlated with the quality and quantity of social interaction with other people. Thus, the rewards of social interaction with children appear to be

"exchangeable and interchangeable" (L. J. Beckman, 1981, p. 1085) with the rewards of interacting with other people. Similarly, older adults who have a close friend are no more likely to become depressed if, for one reason or another, the amount of social interaction they have with other people decreases. In contrast, older adults without a confidant who decrease their interactions with others are at a very high risk for depression (Lowenthal & Haven, 1968). These results support the view that people need some social attachments to be happy and that these attachments are to some extent interchangeable. In particular, close relations with nonrelatives can apparently substitute for relationships with offspring, at least in terms of preventing any significant loss of happiness.

L. J. Beckman (1981) also obtained findings relevant to the satiation hypothesis. She found that the total amount of social interaction with others was a significant predictor of happiness among childless women but not among old women who did have children, and she suggested that restriction of range may account for this differential predictability. Specifically, according to Beckman, most old women with children do have at least a certain minimal level of social interaction, provided by the children, and so these women hardly ever fall into the category of extreme loneliness and social deprivation. Although Beckman repeatedly found that, ironically, interactions with nonoffspring had a bigger impact on happiness than interactions with children, having children visit occasionally seemed to be enough to satisfy the need to belong sufficiently to prevent the most severe problems of deprivation. Above that minimum, further quantity of social interaction did not appear to have an effect.

Substitutability patterns were suggested in a very different way by Rusbult, Zembrodt, and Gunn (1982; see also Rusbult, 1980). They suggested that people remain in their close relationships for several reasons, and one important factor is the availability of desirable alternative potential partners. In other words, people are more likely to leave an intimate relationship if they have some prospect of forming another intimate relationship with someone else soon.

Divorced people are at risk for a multitude of bad outcomes, including illness, homicide, suicide, criminality, and accidental injury or death (Bloom et al., 1979). One explanation is that the divorced population represents a self-selected group of pathologically inclined individuals, but this dispositional argument is weakened by the finding that remarriage tends to reduce or eliminate the elevation in risk. The trauma of divorce itself may be partly responsible for the increase in vulnerability, but although the risks are highest immediately after divorce, they do not fully subside until remarriage. The fact that remarriage appears to eliminate many negative consequences of divorce can indeed be explained in several ways, but it is at least strongly consistent with the hypothesis that the new marriage substitutes for the old one.

Divorce may often be voluntary, but imprisonment is not, and prisoners suffer deprivation of contact with relationship partners outside the prison. Men's prisons are physically dangerous, and both the gang bonding and the cultivation of social isolation commonly found among male prisoners may reflect more a concern with physical safety than anything else. In contrast, female prisons are far less dangerous to inmates, and so it

is relevant to examine how women prisoners adapt to the deprivation of contact with outside partners. Several studies have found that female prisoners commonly form substitute families based on imaginary kinship ties with other prisoners (Burkhart, 1973; Giallombardo, 1966; Toch, 1975). Some pseudomarital bonds appear to involve voluntary homosexuality, which is typically renounced on leaving the prison (Burkhart, 1973). In some cases, these pseudofamilies become quite extensive and complex, with many women playing parts of parent, child, husband, wife, grandparent, and other roles for each other. These patterns appear to be simply an adaptation to prison life based on the desire to experience romantic and family-style belongingness during the time one is deprived of contact with the usual relationship partners.

As we noted earlier, when groups break apart or people move away from relationship partners, there is often initially strong resistance to dissolving the relationship, but this resistance tends to diminish over time (e.g., Lacoursiere, 1980; Lieberman et al., 1973). These efforts to maintain the bond may be driven by the absence of social ties in the new environment, and as people gradually form new attachments they lose the need to sustain the old ones. If this is correct, then future research should find that people's efforts to sustain friendships across long distances are inversely proportional to their opportunities to develop new friendships. For example, when people move overseas, where cultural differences may hinder the development of new intimate friendships, they should be more likely to stay in touch with old friends than when moving to another place in the same country.

Not all relationships are interchangeable, of course. Close relationships based on romantic love may offer a variety of satisfactions that are not easily obtained through nonromantic, nonsexual friendships. Ruhlman and Wolchik (1988) found that there were indeed particular benefits connected with the relationship to the most significant other in a person's life. More precisely, they found that once the social support and hindrance provided by the most significant other person in someone's life were taken into account, there were no additional significant effects of the support and hindrance provided by other people. This pattern of results suggests that people need at least one particularly strong, close attachment and that once they have that, further attachments are subject to some principle of diminishing returns. A similar point was made by Coyne and DeLongis (1986), who concluded, from a review of the social support literature, that the harmful effects of a bad marriage are not offset by having other good relationships; thus, again, the special importance of the marital bond was confirmed. Likewise, although women prisoners adapt to prison by suspending their emotional attachments to most outsiders and forming substitute family relationships with other prisoners, they do exert themselves extensively to maintain the bond with their real children who remain outside the prison (Baunach, 1985). And of course, as Hazan and Shaver (1994a) have pointed out, although children could conceivably affiliate with any available person, they nearly always focus on one particular person, and their need to interact (as evidenced, in part, by distress over separation) becomes mainly focused on that person.

*Critical assessment.* There is an assortment of evidence consistent with the hypotheses of satiation and substitution, but

the evidence is neither systematic enough nor unambiguous enough to regard those hypotheses as strongly supported. Thus, the fact that forming a close romantic attachment leads to withdrawal from other friendships could be partly due to having a limited amount of time to spend socializing rather than to any reduction in need for the other friendships. Likewise, the cultivation of external friendships when a marriage goes bad could be due to a need to discuss the marital problems with a sympathetic outsider rather than a quest to find a new social bond that could furnish what the marriage no longer provides. Although the diversity of spheres yielding consistent findings encourages one to expect that further evidence will continue to fit the satiation and substitution hypotheses, more systematic work is needed to rule out alternative explanations.

Also, there appear to be limits on the extent to which relationships can be substituted. A close romantic attachment to a partner, with sexual attraction, appears to have special benefits that cannot be compensated by other relationships. Still, when such a relationship ends, forming a new one appears to be sufficient to bring the person back to an equally high level of adaptation and happiness, which suggests that, in the final analysis, a new spouse may be an effective substitute for a previous one.

*Conclusion.* People's interaction patterns and surveys of preferences suggest that people seek a limited number of relationships, consistent with the view that the need to belong is subject to satiation and diminishing returns. The first few close social bonds appear to be the most important, beyond which additional ones furnish ever lesser benefits. When people lose such bonds or find their particular partners inadequate, they can often derive similar benefits from others, suggesting that partners can be substituted to some extent. There are certain kinds of relationships that cannot effectively be replaced with other kinds of relationships, although finding a new relationship of the same type appears, in many cases, to be viable and effective. These conclusions are tentative, however, and further, more systematic work is desirable.

#### *Innateness, Universality, and Evolutionary Perspectives*

We proposed that a fundamental need would presumably be innate, which would entail that it is found in all human beings and is not derivative of other motives. This will, of course, be quite difficult to verify, because empirical criteria for testing such a hypothesis are not widely recognized. One approach, however, would be to examine how well the empirical evidence conforms to evolutionary arguments. If evolution has instilled the motivation, then it is presumably universal among human beings and will be present in each person without needing to be derived from other motives.

Barchas (1986) has asserted that "over the course of evolution, the small group became the basic survival strategy developed by the human species" (p. 212). He went on to suggest that the brain and small groups evolved and adapted together, with multiple interrelationships. The evidence reviewed by Barchas remains preliminary, but it does seem that any link between brain structures and small-group formation would strengthen the case for an innate motivation.

Although the psychobiological systems involved in social at-

tachment are not yet well understood, early evidence implicates the brain opioid system. According to Panksepp, Siviy, and Normansell (1985), both the tendency to form social bonds and the emotional effects of social loss (e.g., sadness or grief) are mediated by opioids. The formation and validation of relationships apparently stimulate opioid production, whereas the dissolution of relationships impedes it. As Panksepp et al. put it, "social affect and social bonding are in some fundamental neurochemical sense opioid addictions" (p. 25). Thus, in their view, the tendency to seek social connections with others is based not only on the secondary reinforcements that other people provide but on psychophysiological mechanisms as well.

Multiple evolutionary reasons could be suggested for the readiness to form groups easily. Groups can share labor, resources, and information; diffuse risk; and cooperate to overcome stress or threat (Hogan et al., 1985). Defense against rival groups would also be a significant factor: If other people form into groups, lone individuals would be at a competitive disadvantage in many situations, and so evolution may have selected for people who would form groups defensively. Hence, the evolutionary argument would fit any evidence that group formation or cohesion patterns are increased by external threat.

It has long been noted that external threats increase group cohesion, and some writers have treated this as axiomatic. Stein (1976) reviewed these views in light of the evidence and found that a broad variety of methods have yielded generally consistent findings; that is, external threats do increase cohesion most of the time. There are some circumstances in which groups disintegrate under threat, especially if the threat pertains only to some members of the group or if group members must compete against each other to survive the threat (e.g., if there are too few lifeboats). Staw, Sandelands, and Dutton (1981) also found evidence that group cohesion is sometimes weakened in the aftermath of a threat, especially if the group has failed to defeat the threat and the group members blame each other. Apart from these circumscribed exceptions, however, it is safe to conclude that external threats do generally increase group cohesion.

A remarkable demonstration of the power of external threat to forge lasting bonds was provided by Elder and Clipp's (1988) study of World War II veterans' groups. In Elder and Clipp's results, the effects of maximum threat were discernible 40 years later. That is, four decades after the war, the most enduring and strongest ties were found among veterans who had experienced heavy combat together and had suffered the deaths of some close comrades. Units that had experienced combat without fatalities were less close 40 years later, but they retained stronger ties than the units that had not been in combat together. In other words, the sharing of military experience provided some lasting bonds, these bonds were intensified by shared experience of combat, and they were especially strong if it had been heavy combat that had killed some members of the group. It seems clear that there would be survival benefits to a pattern in which the death of a group member strengthened the ties among the survivors, especially in the face of external danger.

The group formation effects in the Robbers Cave study (described earlier; Sherif et al., 1961/1988) accelerated rapidly after the mutual discovery of the existence of the two rival groups; that is, the implicit threat posed by the opposing group seemed to motivate each boy to cling to his own group more

strongly. Similar processes have been observed in terrorist groups, which mainly become cohesive in the face of external threat and danger. During periods when the conflict with outsiders lapses, terrorist groups experience internal dissent and conflict and may fall apart (see McCauley & Segal, 1987).

Compelling evidence in favor of emphasizing the competitive disadvantage motive for affiliating was provided by Hoyle, Pinkley, and Insko (1989). These researchers noted the irony that encounters between individuals are generally pleasant and supportive, whereas encounters between groups are frequently unpleasant and confrontational, and their first study confirmed these general expectations and stereotypes empirically. In their second study, they sought to determine the decisive factor by comparing interactions between persons, between groups, and between one person and one group. To their surprise, they found that participants' expectations about the interaction were determined mainly by the other party rather than by participants' own belongingness status. When participants expected to interact with a group, they expected an abrasive interaction; when they expected to interact with an individual, they anticipated a pleasant, agreeable interaction. Identical effects were found regardless of whether the participant expected to be alone or to be part of a group. Thus, apparently, the presence of an out-group causes people to anticipate conflict and problematic interactions. Such an expectation could well elicit a motivation to form a group to protect oneself.

A similar conclusion was suggested by Lauderdale, Smith-Cunnien, Parker, and Inverarity (1984). Following Schachter's (1951) studies on group rejection of deviants, they found that increasing an external threat led to increased rejection. The implication was that groups become increasingly oriented toward solidarity when confronted with an external threat.

Apart from threat, the possibility of gaining resources also seems to trigger group cohesion, even when it is functionally irrelevant. Rabbie and Horwitz (1969) assigned participants randomly to two groups. The random assignment alone yielded no effects of group cohesion on their measures of in-group preference, but they did find significant effects after a manipulation in which one group was given a prize (transistor radio) based on a coin flip. The rewarded group and the deprived group both showed increased in-group preference. The prize was logically irrelevant to subsequent group activities and preferences. The implication is apparently that the combination of limited resources and multiple groups triggers an in-group preference response that has no apparent practical or rational basis, which is consistent with the view that it is a deeply rooted and possibly innate tendency rather than a strategic or rational choice.

*Critical assessment.* The evidence linking external threat to increased group cohesion is convincing but does not prove an evolutionary hypothesis of innateness or universality. The evidence for brain mechanisms is likewise supportive but inadequate to prove innateness. The evidence in this section is perhaps best described by stating that the evolutionary hypothesis nicely survived several tests that could have contradicted it.

*Conclusion.* Several patterns seem consistent with evolutionary reasoning. It remains plausible (but unproven) that the need to belong is part of the human biological inheritance. If so, the case for universality and nonderivativeness would be strong.

At present, it seems fair to accept these hypotheses as tentative working assumptions while waiting for further evidence.

### *Apparent Counterexamples*

Although the evidence presented thus far has been largely supportive of the belongingness hypothesis, one might object that our literature search has been structured in ways that predisposed it toward just such favorable indications. It is therefore desirable to examine behavioral patterns that would seemingly constitute boundary conditions or counterexamples to the need to belong. This section briefly considers several.

*Refusal to help or cooperate.* People generally show a significant willingness to help others, but often there may be self-interested motives lurking behind the apparent altruism (e.g., Cialdini, Darby, & Vincent, 1973; Manucia, Baumann, & Cialdini, 1984). To be sure, in many cases people appear to put self-interest ahead of the welfare of others, leading them to disdain opportunities for helping others or cooperating. Entering into the long-running debate about the possibility and reality of truly altruistic behavior is beyond the scope of this article; our goal is merely to ask whether such cases do indeed contradict the belongingness hypothesis. In particular, it is necessary to ask whether these nonhelpful, noncooperative behavior patterns are reduced or eliminated by belongingness.

One of social psychology's best-known findings concerns the unhelpfulness of multiple bystanders at an emergency site. As Darley and Latane's (1968) study and many subsequent investigations (see Latane & Nida, 1981) showed, people tend not to come to the aid of an emergency victim when many other people are also present. Among the reasons for the bystander effect are the sense that it is not one's own responsibility to help and the fear that helping may bring negative consequences to the self. Various findings suggest, however, that belongingness can overcome the nonresponsiveness of bystanders. The bystander effect is apparently robust among strangers (e.g., Darley & Latane, 1968), but in cohesive groups, the opposite pattern is found, namely that larger groups produce more helping (Rutkowski, Gruder, & Romer, 1983). Even the mere anticipation of future interaction among group members is enough to eliminate the bystander effect, making group members quite willing and likely to come to each other's aid (Gottlieb & Carver, 1980).

Social loafing is another pattern in which people put self-interest ahead of cooperative concern for others (e.g., Latane, Williams, & Harkins, 1979). In social loafing, people reduce their efforts when submerged in the group, thereby gaining benefits of the group success without having to exert themselves maximally. Group membership can foster a sense of duty or obligation that can effectively override tendencies to engage in social loafing, however. Harkins and Petty (1982) showed that if people believe that they can make a unique contribution to the group, they do not engage in social loafing, even if individual contributions to the group will not be identified (and thus even if they will not receive credit for their contribution; see also Hardy & Crace, 1991).

The prisoner's dilemma game has been widely used to examine how people choose between a self-interested, individualistic (competitive) response and a cooperative response that can potentially maximize everyone's collective outcomes at the cost or

risk of individual vulnerability to loss. Once again, the presence or apparent possibility of social attachments seems to shift people away from the self-oriented mode toward a more cooperative, collectively beneficial mode of response. The expectation of future interaction increases helpful cooperation in the prisoner's dilemma game, although this effect appears to obtain mainly among high self-monitors (Danheiser & Graziano, 1982). The opportunity to meet and talk with strangers appears to be sufficient to alter responses to a subsequent prisoner's dilemma game in favor of increased cooperation and decreased exploitation-defensiveness (Orbell et al., 1988).

Lastly, the commons dilemma (in which people deplete renewable resources for short-term individual gain) is another pattern in which people typically seek personal advantage at the expense of long-range collective welfare. The commons dilemma also can be reduced or overcome by belongingness, however. Kramer and Brewer (1984) showed that when belongingness is stimulated by making the group identity salient, people are more likely to restrain their self-interested tendencies and instead cooperate with others for the greater good of the group.

More generally, helping appears to be increased by the existence of social bonds. Schoenrade, Batson, Brandt, and Loud (1986) found that the existence of a social relationship increases the motivation for helping. In the absence of a relationship, people help only for egoistic reasons (i.e., self-interest); when a relationship exists, however, people will help for relatively selfless, altruistic reasons (see also Toi & Batson, 1982). Even among strangers, familiarity leads to increased helping, as does a sense of interpersonal dependency (Pearce, 1980). The fact that belongingness can overcome self-interested patterns is shown by evidence that people prefer reciprocity in social exchange to the extent that even overbenefited individuals sometimes feel uncomfortable and distressed even though material self-interest is maximally served under conditions of being overbenefited (Rook, 1987a). The concern with equity and with aiding others is further indicated by the occasionally negative responses of would-be helpers to having their helpful efforts spurned by the intended recipients (e.g., S. Rosen, Mickler, & Collins, 1987).

Throughout this article, we have suggested that the need to belong may be biologically prepared. Evidence with animal species is therefore relevant here. Masserman, Wechkin, and Terris (1964) taught rhesus monkeys to pull a chain for food and then, in one condition, added the contingency that pulling the chain would cause a shock to be delivered to another monkey. Most monkeys refrained from pulling the chain under those conditions, even to the extent of starving themselves for several days rather than cause another monkey to be shocked. These patterns were particularly strong when the 2 animals had previously been cage mates and thus may be presumed to have formed some sort of bond; when the animals were strangers to each other, less than a third showed this form of altruistic, self-sacrificing behavior.

*Nonreciprocation of love.* Although mutual love provides strong satisfactions and hedonic benefits, there are many cases in which people do not reciprocate another's affection and romantic interest. Such refusals to form a social bond might be taken as evidence against the belongingness hypothesis.



On closer examination, however, inspection of patterns of unrequited love does not provide a serious challenge to the belongingness hypothesis, for several reasons. First, most people do want to form a close romantic relationship, and their refusals are typically based on either already having such a relationship with another partner (consistent with the satiation hypothesis) or perceiving the aspiring partner as unsuitable for some reason, such as unattractiveness or incompatibility. Moreover, in many cases, rejectors experience considerable distress such as guilt and empathic pain when rejecting another's offer of love. This distress is consistent with the view that rejecting social attachment goes against some deeply rooted aspect of human nature, even when the person is quite certain that he or she does not want this particular attachment (Baumeister & Wotman, 1992; Baumeister et al., 1993).

*Shyness.* Shy behavior patterns may seem antisocial insofar as the shy person sometimes avoids social encounters, withdraws from ongoing interactions, and acts in other ways that reduce the chances of forming relationships (Leary, 1983). In fact, however, shy people are strongly motivated to form relationships, and shyness may reflect an interpersonal strategy that partially protects the individual against rejection.

When people do not believe that they will be regarded in ways that will result in social acceptance, they may avoid absolute rejection by disaffiliating. Although reticence and withdrawal are unlikely to make particularly good impressions or to bring hearty acceptance from others, they reduce the risk of saying or doing something that others might regard negatively. When one fears rejection, the best tactic may seem to be to participate as little as possible, thereby giving others few reasons to reject one (Shepperd & Arkin, 1990).

At the same time that they pull back, however, shy people engage in behaviors that have been characterized as "innocuously sociable" (Leary, 1983). They smile more (even though they feel anxious rather than happy), nod their heads more in agreement, ask more questions, and use more verbal reinforcers when others are speaking. These behaviors may reflect last-resort tactics to maintain a minimum degree of interpersonal connection in otherwise difficult or threatening encounters (Leary, Knight, & Johnson, 1987).

### General Discussion

We have considered a broad assortment of evidence pertaining to the hypothesis that the desire for interpersonal attachments—the need to belong—is a fundamental human motivation. Most of the metatheoretical requirements we outlined for evaluating such a hypothesis appear to be satisfied, although some issues remain. We begin by reviewing the major conclusions.

Again and again, we found evidence of a basic desire to form social attachments. People form social bonds readily, even under seemingly adverse conditions. People who have anything in common, who share common (even unpleasant) experiences, or who simply are exposed to each other frequently tend to form friendships or other attachments. Moreover, people resist losing attachments and breaking social bonds, even if there is no material or pragmatic reason to maintain the bond and even if maintaining it would be difficult.

Abundant evidence also attests that the need to belong shapes emotion and cognition. Forming or solidifying social attachments generally produces positive emotion, whereas real, imagined, or even potential threats to social bonds generate a variety of unpleasant emotional states. In short, change in belongingness is a strong and pervasive cause of emotion in ways that support the hypothesis of a need to belong. It is also evident that people think a great deal about belongingness. They devote a disproportionate amount of cognitive processing to actual or possible relationship partners and interaction partners, and they reserve particular, more extensive, and more favorable patterns of information processing for people with whom they share social bonds.

Deficits in belongingness apparently lead to a variety of ill effects, consistent with the view that belongingness is a need (as opposed to merely a want). Both psychological and physical health problems are more common among people who lack social attachments. Behavioral pathologies, ranging from eating disorders to suicide, are more common among people who are unattached. Although most of these findings are correlational and many alternative explanations can be suggested, recent efforts have begun controlling for these other factors, and the pure, primary effects of belongingness appear to remain strong. It appears, then, that belongingness is not only pleasant but also apparently very beneficial to the individual in multiple ways.

We proposed two aspects of the need to belong, and both appear to be important. That is, people seem to need frequent, affectively pleasant or positive interactions with the same individuals, and they need these interactions to occur in a framework of long-term, stable caring and concern. People who can satisfy one component but not the other tend to be less satisfied and less well off than people who can satisfy both, but they do seem to derive some benefits from satisfying the one component (as opposed to satisfying neither). More and better evidence is needed on this point, however; most evidence pertains to people who have the bond and lack interactions, rather than the reverse. Also, it is unclear whether the interactions must be pleasant or can be satisfactory if they are merely neutral. The evidence suggests merely that aversive or conflictual interactions fail to satisfy the need. Some evidence suggests that a framework of mutual, reciprocal concern is best, but the effects and importance of mutuality need further investigation.

The need to belong also appears to conform to motivational patterns of satiation and substitution. People need a few close relationships, and forming additional bonds beyond those few has less and less impact. Having two as opposed to no close relationships may make a world of difference to the person's health and happiness; having eight as opposed to six may have very little consequence. When a social bond is broken, people appear to recover best if they form a new one, although each individual life tends to involve some particularly special relationships (such as filial or marital bonds) that are not easily replaced. People without intimate partners engage in a variety of activities to find partners, but people who have partners already are much less active at seeking additional relationships, consistent with the satiation hypothesis.

We reviewed evidence that the need to belong affects a broad variety of behaviors; indeed, the range is sufficiently broad as to render less plausible any notion that the need to belong is a

product of certain other factors or motives. We also noted that evidence about belongingness seems to implicate some brain mechanisms and to conform to patterns that evolutionary theory would suggest, both of which seem consistent with the argument that the need is innate in humans. Still, the nonderivative hypothesis is probably the least well supported aspect of our theory, not because of any clear evidence deriving the need to belong from other motives but simply perhaps because it is relatively difficult to collect compelling data to show that a motive is not derivative. The issue of which motives derive from which others appears to be an important challenge for future motivation research.

We also considered several counterexamples that at least superficially suggested tendencies to reject social attachment. On close inspection, these patterns did not stand up as counterexamples, and indeed there was generally strong evidence of a positive need to belong that increased the subjective difficulty of rejecting or avoiding attachment.

We conclude, then, that the present state of the empirical evidence is sufficient to confirm the belongingness hypothesis. The need to belong can be considered a fundamental human motivation.

### *Implications for Psychological Theory*

If the belongingness hypothesis is indeed correct, then it seems plausible that many psychological phenomena may be affected by this motivation. Clearly, patterns of group behavior and close relationships can be understood as serving the need to belong. It is thus not necessary to derive all group and intimate affiliation patterns from other motives, such as the fact that groups may confer pragmatic benefits or bolster self-esteem (see also Turner, 1985). People may simply desire to belong to groups. Patterns of self-presentation (Baumeister, 1982; Leary, 1994; Leary & Kowalski, 1990; Schlenker, 1980), interpersonal redress and excuse making (R. S. Miller & Leary, 1992; Schlenker, 1980; C. R. Snyder, Higgins, & Stucky, 1983), and group conformity (Moreland & Levine, 1989) may all be seen in the context of enhancing one's chances of inclusion in groups and relationships. Also, it may be no accident that people seem most likely to be prejudiced against members of groups to which they have little or no opportunity to belong. Thus, the most common and widespread bases of prejudice are race, gender, and national origin. People bolster their own in-group at the expense of out-groups from which they are excluded (e.g., Meindl & Lerner, 1984).

Although antisocial behavior might, at first glance, be regarded as another potential counterexample for the belongingness hypothesis (because antisocial behavior makes enemies and alienates other people), it is readily apparent that belongingness has close ties to it. Members of some groups are pressured to commit violent acts, ranging from vandalism to murder, to be accepted by and to demonstrate commitment to the group (e.g., Breitman, 1991; Freud, 1913/1956; Hogan & Jones, 1983; Rosenberg, 1991; Sarbin, 1982; Staub, 1989; Toch, 1992). It seems likely that aggression as well may have some belongingness as a prerequisite, because aggression risks alienating other people and so only people with firm attachments can safely engage in aggressive behavior.

The centrality of belongingness to human psychological functioning also has implications for the treatment of emotional and behavioral problems. From our standpoint, a great deal of people's psychological difficulties reflects emotional and behavioral reactions to perceived threats to social bonds. As has been shown, many of the emotional problems for which people seek professional help (anxiety, depression, grief, loneliness, relationship problems, and the like) result from people's failure to meet their belongingness needs. Furthermore, a great deal of neurotic, maladaptive, and destructive behavior seems to reflect either desperate attempts to establish or maintain relationships with other people or sheer frustration and purposelessness when one's need to belong goes unmet.

### *Implications for Other Fields*

We suggested at the outset that the belongingness hypothesis ought to have implications that go beyond immediate psychological functioning and, indeed, that it might prove useful as an explanatory construct for the phenomena studied by researchers in other fields. We now consider briefly some nonpsychological applications of the need to belong.

Contrary to cultural materialism, we have proposed that many aspects of human culture are directly and functionally linked to enabling people to satisfy the psychological need to belong. If this is correct, then some historical and sociological changes in the structures of society should be linked to changes in the bases for belongingness. For example, membership in many organizations (including corporate employment) has largely ceased to depend on family connections the way it once did, with corresponding changes in the definition and power balance in families, the educational system (which provides credentials), and other placement systems (e.g., Burgess & Locke, 1945; Fass, 1977).

By the same token, the decline of arranged marriages and the increasing availability of divorce have made romantic attachment more dependent on individual attractiveness and other traits. Concern over the self as an instrument for attracting others and maintaining attachments should therefore increase. Thus, becoming old or fat would be less threatening if divorce were impossible or if marriages were arranged. With the increasing threat, social structures should emerge, for example, to help people look young or lose weight. Also, sexuality has a frequently changing relationship to social inclusion, and various eras have included or excluded people on the basis of sexual chastity, skill, appeal, and perceived healthiness.

A general pattern may well be that cultures use social inclusion to reward, and exclusion to punish, their members as a way of enforcing their values. As is well known, many early civilizations equated exile with death, which seems to suggest that life is desirable only within the network of close relationships to which the person belongs. Modern civilizations tend to use prison to punish people, which again invokes the principle that depriving people of contact with relationship partners is highly aversive; solitary confinement is generally recognized as the most severe and aversive form of imprisonment. On the positive side, the evolution of modern society has seen an increasingly broad and fundamental quest for fame. Braudy's (1986) history of fame characterizes the desire for fame as based on a "dream

of acceptance" that holds the (often illusory) promise that once a person achieves fame, he or she will be embraced and sought by others for the rest of his or her life. Fame may well be thus another instance of the use of social inclusion as a reward. A. H. Buss (1983) has pointed out that both the presence of others and the attention of others are important social rewards, and the deprivation of such contact has often been used as powerful social punishment.

Turning to political science, a well-known article by Morgenthau (1962) argued that the pursuit of power can be understood as the counterpart to the pursuit of love in that both involve an attempt to escape from loneliness. In Morgenthau's analysis, the human condition suffers from the threat of isolation, and by breaking down the barriers between one another people hope to achieve a sense of togetherness. The main difference between love and power is that love aspires to a mutual dissolving of personal boundaries, leading to an egalitarian merging into a new whole, whereas power seeks a unilateral overcoming of boundaries, by which the will of the more powerful person becomes the will of both. Morgenthau noted that the pursuit of power often fails to overcome loneliness, so that, ironically, the most powerful individuals end up feeling still isolated and lonely (hence, the tendency for rulers to demand that their subjects love them too). For present purposes, the main point is that the need to belong may be regarded as a major source of the desire for power.

The role of belongingness is also apparent in religion. Although ideological belief and acceptance of metaphysical doctrines are often regarded as the essence of religious participation, Stark and Bainbridge (1985) reviewed considerable evidence suggesting that the need to belong may be a more compelling factor than the need to believe. They noted that movement into and out of religious groups (including cults, sects, and mainstream denominations) depends much more heavily on social ties than on ideological belief. Indeed, many people do not fully grasp or understand the theological belief structure of their own religion (e.g., the subtle differences between the many Protestant denominations), but they are well aware of what sort of people in their community belong to which religion. Cults mainly attract people who are socially isolated or lonely, and these individuals are often attracted particularly by the promise of becoming part of a community or gaining a sense of belonging. Those who form social attachments to other members of the cult tend to remain, whereas those who do not form social bonds tend to leave soon. By the same token, Kirkpatrick and Shaver (1992) have shown multiple links between religious beliefs and adult attachment styles or relationship patterns.

Thus far we have focused on the broad need itself, but some specific patterns regarding human sociality may also have implications for other fields. For example, we have noted that an interesting psychological issue involves the factors that determine whether previously opposed groups do or do not integrate into larger wholes (cf. Sherif et al., 1961/1988), such that individuals redefine their allegiance so as to belong to the new group. Such reidentifications have been important throughout history. The Wars of the Roses were finally decided by the battle of Bosworth, in which Richard III was killed, thereby enabling

Henry Tudor to establish the dynasty that ruled Elizabethan England; that battle (like others in the conflict) turned on the dubious loyalty and betrayal of several major groups that were incompletely merged into their respective sides (Ross, 1976). The Zulu empire in South Africa was formed by incorporating many other groups that had been rivals of and neighbors to the original Zulus, and those new identifications persist even today, long past the fall of that empire (Morris, 1965). Meanwhile, however, Angola, Rwanda, and Uganda have suffered repeated bouts of cruel violence and civil war between former rival groups that failed to integrate and identify with the national unity. Nor is this problem unique to Africa; the former Yugoslavia provided a vivid example of bitter factional violence re-emerging after decades of seemingly peaceful coexistence, and the same goes for Sri Lanka. In the United States, melting pot ideology has recently gone out of fashion as the nation has begun to accept the problematic reality of multiple, separate enclaves defined by racial and ethnic backgrounds. In short, it appears that asking people to redefine their belongingness to accommodate new realities is difficult and only sometimes successful.

These applications are not intended as exhaustive, nor even as the most compelling or important. They are merely intended as an indication that the need to belong could be used as an interpretive construct outside of psychological laboratories.

### Concluding Remarks

At present, it seems fair to conclude that human beings are fundamentally and pervasively motivated by a need to belong, that is, by a strong desire to form and maintain enduring interpersonal attachments. People seek frequent, affectively positive interactions within the context of long-term, caring relationships. As a speculative point of theory or impressionistic observation, the need to belong is not a new idea; indeed, we noted a variety of previous psychological theorists who have proposed it in one form or another. What is new, however, is the existence of a large body of empirical evidence with which to evaluate that hypothesis.

If psychology has erred with regard to the need to belong, in our view, the error has not been to deny the existence of such a motive so much as to underappreciate it. This review has shown multiple links between the need to belong and cognitive processes, emotional patterns, behavioral responses, and health and well-being. The desire for interpersonal attachment may well be one of the most far-reaching and integrative constructs currently available to understand human nature.

### References

- Adler, P. (1980). On becoming a prostitute. In E. Muga (Ed.), *Studies in prostitution* (pp. 22-26). Nairobi, Kenya: Kenya Literature Bureau.
- Ainsworth, M. D. (1989). Attachments beyond infancy. *American Psychologist*, 44, 709-716.
- Anderson, C. A. (1991). How people think about causes: Examination of the typical phenomenal organization of attributions for success and failure. *Social Cognition*, 9, 295-329.
- Anderson, S. A., Russell, C. S., & Schumm, W. R. (1983). Perceived

- marital quality and family life-cycle categories: A further analysis. *Journal of Marriage and the Family*, 45, 127-139.
- Argyle, M. (1987). *The psychology of happiness*. London: Methuen.
- Armstrong, J. G., & Roth, D. M. (1989). Attachment and separation in eating disorders: A preliminary investigation. *International Journal of Eating Disorders*, 8, 141-155.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60, 241-253.
- Audy, J. R. (1980). Man the lonely animal: Biological roots of loneliness. In J. Hartog, J. R. Audy, & Y. A. Cohen (Eds.), *The anatomy of loneliness* (pp. 111-128). New York: International Universities Press.
- Axelrod, R., & Hamilton, W. D. (1981). The evolution of cooperation. *Science*, 211, 1390-1396.
- Barash, D. P. (1977). *Sociobiology and behavior*. New York: Elsevier.
- Barchas, P. (1986). A sociophysiological orientation to small groups. In E. Lawler (Ed.), *Advances in group processes* (Vol. 3, pp. 209-246). Greenwich, CT: JAI Press.
- Barden, R. C., Garber, J., Leiman, B., Ford, M. E., & Masters, J. C. (1985). Factors governing the effective remediation of negative affect and its cognitive and behavioral consequences. *Journal of Personality and Social Psychology*, 49, 1040-1053.
- Barocas, R., & Vance, F. L. (1974). Physical appearance and personal adjustment counseling. *Journal of Counseling Psychology*, 21, 96-100.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, 91, 3-26.
- Baumeister, R. F. (1990). Suicide as escape from self. *Psychological Review*, 97, 90-113.
- Baumeister, R. F. (1991). *Meanings of life*. New York: Guilford Press.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243-267.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (in press). Personal narratives about guilt: Role in action control and interpersonal relationships. *Basic and Applied Social Psychology*.
- Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology*, 9, 165-195.
- Baumeister, R. F., & Wotman, S. R. (1992). *Breaking hearts: The two sides of unrequited love*. New York: Guilford Press.
- Baumeister, R. F., Wotman, S. R., & Stillwell, A. M. (1993). Unrequited love: On heartbreak, anger, guilt, scriptlessness, and humiliation. *Journal of Personality and Social Psychology*, 64, 377-394.
- Baunach, P. J. (1985). *Mothers in prison*. New Brunswick, NJ: Transaction Books.
- Beckman, K., Marsella, A. J., & Finney, R. (1979). Depression in the wives of nuclear submarine personnel. *American Journal of Psychiatry*, 136, 524-526.
- Beckman, L. J. (1981). Effects of social interaction and children's relative inputs on older women's psychological well-being. *Journal of Personality and Social Psychology*, 41, 1075-1086.
- Bednarski, R., & Leary, M. R. (1994). *Self-esteem and fear of death*. Unpublished manuscript, Wake Forest University, Winston-Salem, NC.
- Belsky, J. (1979). The interrelation of parental and spousal behavior during infancy in traditional nuclear families: An exploratory analysis. *Journal of Marriage and the Family*, 41, 749-755.
- Belsky, J. (1981). Early human experience: A family perspective. *Developmental Psychology*, 17, 3-23.
- Berman, W. H. (1988). The role of attachment in the post-divorce experience. *Journal of Personality and Social Psychology*, 54, 496-503.
- Bernard, J. (1982). *The future of marriage*. New Haven, CT: Yale University Press.
- Berscheid, E., & Walster, E. (1974). Physical attractiveness. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 7, pp. 158-215). New York: Academic Press.
- Bhatti, B., Derezotes, D., Kim, S., & Specht, H. (1989). The association between child maltreatment and self-esteem. In A. M. Mecca, N. J. Smelser, & J. Vasconcellos (Eds.), *The social importance of self-esteem* (pp. 24-71). Berkeley: University of California Press.
- Billig, M., & Tajfel, H. (1973). Social categorization and similarity in intergroup behavior. *European Journal of Social Psychology*, 3, 27-51.
- Bloom, B. L., White, S. W., & Asher, S. J. (1979). Marital disruption as a stressful life event. In G. Levinger & O. C. Moles (Eds.), *Divorce and separation: Context, causes, and consequences* (pp. 184-200). New York: Basic Books.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation anxiety and anger*. New York: Basic Books.
- Braudy, L. (1986). *The frenzy of renown: Fame and its history*. New York: Oxford University Press.
- Brehm, S. S. (1987). Social support and clinical practice. In J. E. Maddux, C. D. Stoltenberg, & R. Rosenwein (Eds.), *Social processes in clinical and counseling psychology* (pp. 26-38). New York: Springer-Verlag.
- Breitman, R. (1991). *The architect of genocide: Himmler and the final solution*. Hanover, NH: Brandeis University Press.
- Brenner, M. W. (1976). *Memory and interpersonal relations*. Unpublished doctoral dissertation, University of Michigan, Ann Arbor.
- Brewer, M. B. (1979). Ingroup bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86, 307-324.
- Brewer, M. B., & Silver, M. (1978). Ingroup bias as a function of task characteristics. *European Journal of Social Psychology*, 8, 393-400.
- Bridges, W. (1980). *Transitions: Making sense of life's changes*. Reading, MA: Addison-Wesley.
- Brown, J. D. (1986). Evaluations of self and others: Self-enhancement biases in social judgments. *Social Cognition*, 4, 353-376.
- Browning, C. R. (1992). *Ordinary men: Reserve Police Battalion 101 and the final solution in Poland*. New York: Harper Collins.
- Bunker, B. B., Zubek, J. M., Vanderslice, V. J., & Rice, R. W. (1992). Quality of life in dual-career families: Commuting versus single-residence couples. *Journal of Marriage and the Family*, 54, 399-407.
- Burgess, E. W., & Locke, H. J. (1945). *The family: From institution to companionship*. New York: American Book.
- Burkhart, K. (1973). *Women in prison*. Garden City, NY: Doubleday.
- Buss, A. H. (1983). Social rewards and personality. *Journal of Personality and Social Psychology*, 44, 553-563.
- Buss, D. M. (1990). The evolution of anxiety and social exclusion. *Journal of Social and Clinical Psychology*, 9, 196-210.
- Buss, D. M. (1991). Evolutionary personality psychology. *Annual Review of Psychology*, 42, 459-491.
- Caldwell, M. A., & Peplau, L. A. (1982). Sex differences in same-sex friendship. *Sex Roles*, 8, 721-732.
- Campbell, A. (1981). *The sense of well-being in America*. New York: McGraw-Hill.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. New York: Russell Sage Foundation.
- Carnelley, K. B., Pietromonaco, P. R., & Jaffe, K. (1994). Depression, working models of others, and relationship functioning. *Journal of Personality and Social Psychology*, 66, 127-140.
- Cash, T. F. (1985). Physical appearance and mental health. In J. A. Graham & A. Kligman (Eds.), *The psychology of cosmetic treatments* (pp. 196-216). New York: Praeger.
- Cialdini, R. B., Darby, B., & Vincent, J. (1973). Transgression and al-

- truism: A case for hedonism. *Journal of Experimental Social Psychology*, 9, 502-516.
- Clark, L. A., & Watson, D. (1988). Mood and the mundane: Relations between daily life events and self-reported mood. *Journal of Personality and Social Psychology*, 54, 296-308.
- Clark, M. S. (1984). Record keeping in two types of relationships. *Journal of Personality and Social Psychology*, 47, 549-557.
- Clark, M. S. (1986). Evidence for the effectiveness of manipulations of communal and exchange relationships. *Personality and Social Psychology Bulletin*, 12, 414-425.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37, 12-24.
- Clark, M. S., Mills, J., & Corcoran, D. M. (1989). Keeping track of needs and inputs of friends and strangers. *Personality and Social Psychology Bulletin*, 15, 533-542.
- Clark, M. S., Mills, J., & Powell, M. C. (1986). Keeping track of needs in communal and exchange relationships. *Journal of Personality and Social Psychology*, 51, 333-338.
- Clark, M. S., Ouellette, R., Powell, M. C., & Milberg, S. (1987). Recipient's mood, relationship type, and helping. *Journal of Personality and Social Psychology*, 53, 94-103.
- Cohen, S., Sherrrod, D. R., & Clark, M. S. (1986). Social skills and the stress-protective role of social support. *Journal of Personality and Social Psychology*, 50, 963-973.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- Conte, H. R., Weiner, M. B., & Plutchik, R. (1982). Measuring death anxiety: Conceptual, psychometric, and factor-analytic aspects. *Journal of Personality and Social Psychology*, 43, 775-785.
- Coon, C. S. (1946). The universality of natural groupings in human societies. *Journal of Educational Sociology*, 20, 163-168.
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38, 668-678.
- Costa, P. T., & McCrae, R. R. (1984). Personality as a lifelong determinant of well-being. In C. Z. Malatesta & C. E. Izard (Eds.), *Emotion in adult development* (pp. 141-157). Beverly Hills, CA: Sage.
- Costa, P. T., McCrae, R. R., & Zonderman, A. B. (1987). Environmental and dispositional influences on well-being: Longitudinal follow-up of an American national sample. *British Journal of Psychology*, 78, 299-306.
- Coyne, J. C., & DeLongis, A. (1986). Going beyond social support: The role of social relationships in adaptation. *Journal of Consulting and Clinical Psychology*, 54, 454-460.
- Craighead, W. E., Kimball, W. H., & Rehak, R. S. (1979). Mood changes, physiological responses, and self-statements during social rejection imagery. *Journal of Consulting and Clinical Psychology*, 47, 385-396.
- Cunningham, M. R., Steinberg, J., & Grev, R. (1980). Wanting to and having to help: Separate motivations for positive mood and guilt-induced helping. *Journal of Personality and Social Psychology*, 38, 181-192.
- Cutrona, C. E. (1986). Behavioral manifestations of social support: A microanalytic investigation. *Journal of Personality and Social Psychology*, 51, 201-208.
- Cutrona, C. E. (1989). Ratings of social support by adolescents and adult informants: Degree of correspondence and prediction of depressive symptoms. *Journal of Personality and Social Psychology*, 57, 723-730.
- Danheiser, P. R., & Graziano, W. G. (1982). Self-monitoring and cooperation as a self-presentational strategy. *Journal of Personality and Social Psychology*, 42, 497-505.
- Darley, J. M., & Latane, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 8, 377-383.
- DeLongis, A., Folkman, S., & Lazarus, R. S. (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *Journal of Personality and Social Psychology*, 54, 486-495.
- de Rivera, J. (1984). The structure of emotional relationships. In P. Shaver (Ed.), *Review of personality and social psychology*, Vol. 5: *Emotions, relationships, and health* (pp. 116-145). Beverly Hills, CA: Sage.
- Devine, P. G., Sedikides, C., & Fuhrman, R. W. (1989). Goals in social information processing: The case of anticipated interaction. *Journal of Personality and Social Psychology*, 56, 680-690.
- DiTommaso, E., & Spinner, B. (1993). The development and initial validation of the social and emotional loneliness scale for adults. *Personality and Individual Differences*, 14, 127-134.
- Donne, J. (1975). *Devotions upon emergent occasions*. Montreal, Canada: McGill Queens University Press.
- Douglas, J. D. (1967). *The social meanings of suicide*. Princeton, NJ: Princeton University Press.
- Drill, R. L. (1987). Young adult children of divorced parents: Depression and the perception of loss. *Journal of Divorce*, 10, 169-187.
- Durkheim, E. (1963). *Suicide*. New York: Free Press. (Original work published 1897)
- Egan, G. (1970). *Encounter: Group processes for interpersonal growth*. Monterey, CA: Brooks/Cole.
- Eisenberger, R. (1970). Is there a deprivation-satiation function for social approval? *Psychological Bulletin*, 74, 255-275.
- Elder, G. H., & Clipp, E. C. (1988). Wartime losses and social bonding: Influence across 40 years in men's lives. *Psychiatry*, 51, 177-198.
- Emery, R. E. (1982). Interparental conflict and the children of divorce. *Psychological Bulletin*, 92, 310-330.
- Epstein, S. (1992). The cognitive self, the psychoanalytic self, and the forgotten selves. *Psychological Inquiry*, 3, 34-37.
- Erber, F., & Fiske, S. T. (1984). Outcome dependency and attention to inconsistent information. *Journal of Personality and Social Psychology*, 47, 709-726.
- Farina, A., Burns, G. L., Austad, C., Bugglin, C. S., & Fischer, E. H. (1986). The role of physical attractiveness in the readjustment of discharged psychiatric patients. *Journal of Abnormal Psychology*, 86, 510-517.
- Fass, P. (1977). *The damned and the beautiful: American youth in the 1920s*. Oxford, England: Oxford University Press.
- Festinger, L., Schachter, S., & Back, K. (1950). *Social pressures in informal groups: A study of a housing community*. Palo Alto, CA: Stanford University Press.
- Fincham, F. D., Beach, S. R., & Baucom, D. H. (1987). Attribution processes in distressed and nondistressed couples: 4. Self-partner attribution differences. *Journal of Personality and Social Psychology*, 52, 739-748.
- Forsyth, D. R. (1991). Change in therapeutic groups. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology* (pp. 664-680). New York: Pergamon Press.
- Forsyth, D. R., & Schlenker, B. R. (1977). Attributing the causes of group performance: Effects of performance quality, task importance, and future testing. *Journal of Personality*, 45, 220-236.
- Freedman, J. (1978). *Happy people: What happiness is, who has it, and why*. New York: Harcourt Brace Jovanovich.
- Freud, S. (1930). *Civilization and its discontents* (J. Riviere, Trans.). London: Hogarth Press.
- Freud, S. (1956). *Totem und Tabu* [Totem and taboo]. Frankfurt, Germany: Fischer Bücherei. (Original work published 1913)
- Fromm, E. (1955). *The sane society*. New York: Holt, Rinehart & Winston.

- Fromm, E. (1956). *The art of loving*. New York: Harper & Brothers.
- Geis, F. L., & Moon, T. H. (1981). Machiavellianism and deception. *Journal of Personality and Social Psychology*, *41*, 766-775.
- Gerstel, N., & Gross, H. (1982). Commuter marriages: A review. *Marriage and Family Review*, *5*, 71-93.
- Gerstel, N., & Gross, H. (1984). *Commuter marriage: A study of work and family*. New York: Guilford Press.
- Gewirtz, J. L., & Baer, D. M. (1958). Deprivation and satiation of social reinforcers as drive conditions. *Journal of Abnormal and Social Psychology*, *57*, 165-172.
- Giallombardo, R. (1966). *Society of women: A study of a women's prison*. New York: Wiley.
- Glenn, N. D., & McLanahan, S. (1982). Children and marital happiness: A further specification of the relationship. *Journal of Marriage and the Family*, *44*, 63-72.
- Goffman, E. (1971). *Relations in public*. New York: Harper Colophon.
- Goode, W. J. (1956). *After divorce*. New York: Free Press.
- Goodwin, J. S., Hunt, W. C., Key, C. R., & Samet, J. M. (1987). The effect of marital status on stage, treatment, and survival of cancer patients. *Journal of the American Medical Association*, *258*, 3125-3130.
- Gottlieb, J., & Carver, C. (1980). Anticipation of future interaction and the bystander effect. *Journal of Experimental Social Psychology*, *16*, 253-260.
- Gouaux, C. (1971). Induced affective states and interpersonal attraction. *Journal of Personality and Social Psychology*, *20*, 37-43.
- Govaerts, K., & Dixon, D. N. (1988). . . . Until careers do us part: Vocational and marital satisfaction in the dual-career commuter marriage. *International Journal for the Advancement of Counseling*, *11*, 265-281.
- Groth, A. N. (1979). *Men who rape*. New York: Plenum Press.
- Guisinger, S., & Blatt, S. J. (1994). Individuality and relatedness: Evolution of a fundamental dialectic. *American Psychologist*, *49*, 104-111.
- Hamachek, D. (1992). *Encounters with the self* (4th ed.). San Diego, CA: Harcourt Brace Jovanovich.
- Hardy, C. J., & Crace, R. K. (1991). The effects of task structure and teammate competence on social loafing. *Journal of Sport and Exercise Psychology*, *13*, 372-381.
- Harkins, S. G., & Petty, R. E. (1982). Effects of task difficulty and task uniqueness on social loafing. *Journal of Personality and Social Psychology*, *43*, 1214-1229.
- Harlow, H. F., Harlow, M. K., & Suomi, S. J. (1971). From thought to therapy: Lessons from a primate laboratory. *American Scientist*, *59*, 538-549.
- Harris, M. (1974). *Cows, pigs, wars, and witches: The riddles of culture*. New York: Random House.
- Harris, M. (1978). *Cannibals and kings: The origins of cultures*. New York: Random House.
- Harris, M. (1979). *Cultural materialism: The struggle for a science of culture*. New York: Random House.
- Harrison, A. A., & Connors, M. M. (1984). Groups in exotic environments. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 18, pp. 49-87). New York: Academic Press.
- Hays, R. B. (1985). A longitudinal study of friendship development. *Journal of Personality and Social Psychology*, *48*, 909-924.
- Hazan, C., & Shaver, P. R. (1994a). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, *5*, 1-22.
- Hazan, C., & Shaver, P. R. (1994b). Deeper into attachment theory. *Psychological Inquiry*, *5*, 68-79.
- Hill, C. T., Rubin, Z., & Peplau, L. A. (1976). Breakups before marriage: The end of 103 affairs. *Journal of Social Issues*, *32*, 147-168.
- Hobfall, S. E., & London, P. (1986). The relationship of self-concept and social support to emotional distress among women during the war. *Journal of Social and Clinical Psychology*, *4*, 189-203.
- Hogan, R. (1983). A socioanalytic theory of personality. In M. Page & R. Dienstbier (Eds.), *Nebraska Symposium on Motivation, 1982* (pp. 55-89). Lincoln: University of Nebraska Press.
- Hogan, R., & Jones, W. H. (1983). A role theoretical model of criminal conduct. In W. S. Laufer & J. M. Days (Eds.), *Personality theory, moral development, and criminal behavior* (pp. 3-21). Lexington, MA: Lexington Books.
- Hogan, R., Jones, W. H., & Cheek, J. M. (1985). Socioanalytic theory: An alternative to armadillo psychology. In B. R. Schlenker (Ed.), *The self and social life* (pp. 175-198). New York: McGraw-Hill.
- Holmes, J. G., & Rempel, J. K. (1989). Trust in close relationships. In M. Clark (Ed.), *Close relationships: Review of personality and social psychology* (Vol. 10, pp. 187-220). Newbury Park, CA: Sage.
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, *11*, 213-218.
- Holt, P. A., & Stone, G. L. (1988). Needs, coping strategies, and coping outcomes associated with long-distance relationships. *Journal of College Student Development*, *29*, 136-141.
- Horney, K. (1945). *Our inner conflicts: A constructive theory of neurosis*. New York: Norton.
- Hotard, S. R., McFatter, R. M., McWhirter, R. M., & Stegall, M. E. (1989). Interactive effects of extraversion, neuroticism, and social relationships on subjective well-being. *Journal of Personality and Social Psychology*, *57*, 321-331.
- Howard, J. W., & Rothbart, M. (1980). Social categorization and memory for in-group and out-group behavior. *Journal of Personality and Social Psychology*, *38*, 301-310.
- Hoyle, R. H., & Crawford, A. M. (in press). Use of individual-level data to investigate group phenomena: Issues and strategies. *Small Group Research*.
- Hoyle, R. H., Pinkley, R. L., & Insko, C. A. (1989). Perceptions of social behavior: Evidence of differing expectations for interpersonal and intergroup interaction. *Personality and Social Psychology Bulletin*, *15*, 365-376.
- Isenberg, S. (1991). *Women who love men who kill*. New York: Simon & Schuster.
- Jankowski, M. S. (1991). *Islands in the street: Gangs and American urban society*. Berkeley: University of California Press.
- Jones, W. H. (1981). Loneliness and social contact. *Journal of Social Psychology*, *113*, 295-296.
- Jones, W. H., & Kugler, K. (in press). Interpersonal correlates of the guilt inventory. *Journal of Personality Assessment*.
- Jones, W. H., Kugler, K., & Adams, P. (1995). You always hurt the one you love: Guilt and transgressions against relationship partners. In K. Fischer & J. Tangner (Eds.), *Self-conscious emotion* (pp. 301-321). New York: Guilford Press.
- Kaufman, S. R. (1986). *The ageless self: Sources of meaning in late life*. New York: Meridian.
- Kenrick, D. T., & Cialdini, R. B. (1977). Romantic attraction: Misattribution versus reinforcement explanations. *Journal of Personality and Social Psychology*, *35*, 381-391.
- Kenrick, D. T., & Johnson, G. A. (1979). Interpersonal attraction in aversive environments: A problem for the classical conditioning paradigm? *Journal of Personality and Social Psychology*, *37*, 572-579.
- Kiecolt-Glaser, J. K., Fisher, L. D., Ogrocki, P., Stout, J. C., Speicher, C. E., & Glaser, R. (1987). Marital quality, marital disruption, and immune function. *Psychosomatic Medicine*, *49*, 13-34.
- Kiecolt-Glaser, J. K., Garner, W., Speicher, C., Penn, G. M., Holliday, J., & Glaser, R. (1984). Psychosocial modifiers of immunocompetence in medical students. *Psychosomatic Medicine*, *46*, 7-14.
- Kiecolt-Glaser, J. K., Ricker, D., George, J., Messick, G., Speicher, C. E., Garner, W., & Glaser, R. (1984). Urinary cortisol levels, cellu-

- lar immunocompetency, and loneliness in psychiatric inpatients. *Psychosomatic Medicine*, 46, 15–23.
- Kirkpatrick, L. A., & Shaver, P. R. (1992). An attachment-theoretical approach to romantic love and religious belief. *Personality and Social Psychology Bulletin*, 18, 266–275.
- Kramer, R. M., & Brewer, M. B. (1984). Effects of group identity on resource use in a simulated commons dilemma. *Journal of Personality and Social Psychology*, 46, 1044–1057.
- Kunz, P. R., & Woolcott, M. (1976). Season's greetings: From my status to yours. *Social Science Research*, 5, 269–278.
- Lacoursiere, R. B. (1980). *The life cycles of groups: Group developmental stage theory*. New York: Human Sciences Press.
- Lakey, B., & Cassady, P. B. (1990). Cognitive processes in perceived social support. *Journal of Personality and Social Psychology*, 59, 337–343.
- Larkin, M. (1972). *Experiential groups: The uses of interpersonal encounter, psychotherapy groups, and sensitivity training*. Morristown, NJ: General Learning Press.
- Latane, B., Eckman, J., & Joy, V. (1966). Shared stress and interpersonal attraction. *Journal of Experimental Social Psychology*, 1 (Suppl.), 80–94.
- Latane, B., & Nida, S. (1981). Ten years of research on group size and helping. *Psychological Bulletin*, 89, 308–324.
- Latane, B., Williams, K., & Harkins, S. G. (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology*, 37, 822–832.
- Lauderdale, P., Smith-Cunnien, P., Parker, J., & Inverarity, J. (1984). External threat and the definition of deviance. *Journal of Personality and Social Psychology*, 46, 1058–1068.
- Lawson, A. (1988). *Adultery: An analysis of love and betrayal*. New York: Basic Books.
- Leary, M. R. (1983). *Understanding social anxiety: Social, personality, and clinical perspectives*. Beverly Hills, CA: Sage.
- Leary, M. R. (1990). Responses to social exclusion: Social anxiety, jealousy, loneliness, depression, and low self-esteem. *Journal of Social and Clinical Psychology*, 9, 221–229.
- Leary, M. R. (1994). *Self-presentation: Impression management and interpersonal behavior*. Dubuque, IA: Brown & Benchmark.
- Leary, M. R., & Downs, D. L. (in press). Interpersonal functions of the self-esteem motive: The self-esteem system as a sociometer. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem*. New York: Plenum Press.
- Leary, M. R., & Forsyth, D. R. (1987). Attributions of responsibility for collective endeavors. In C. Hendrick (Ed.), *Review of personality and social psychology*, Vol. 8: *Group processes* (pp. 167–188). Newbury Park, CA: Sage.
- Leary, M. R., Knight, P. D., & Johnson, K. A. (1987). Social anxiety and dyadic conversation: A verbal response analysis. *Journal of Social and Clinical Psychology*, 5, 34–50.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107, 34–47.
- Lewin, K. (1951). *Field theory in social sciences*. New York: Harper & Row.
- Lieberman, M. A., Yalom, I. D., & Miles, M. B. (1973). *Encounter groups: First facts*. New York: Basic Books.
- Linville, P. W., & Jones, E. E. (1980). Polarized appraisals of out-group members. *Journal of Personality and Social Psychology*, 38, 689–703.
- Locksley, A., Ortiz, V., & Hepburn, C. (1980). Social categorization and discriminatory behavior: Extinguishing the minimal intergroup discrimination effect. *Journal of Personality and Social Psychology*, 39, 773–783.
- Lofland, L. H. (1982). Loss and human connection: An exploration into the nature of the social bond. In W. Ickes & E. S. Knowles (Eds.), *Personality, roles, and social behavior* (pp. 219–242). New York: Springer-Verlag.
- Lowenthal, M. F., & Haven, C. (1968). Interaction and adaptation: Intimacy as a critical variable. *American Sociological Review*, 33, 20–30.
- Lynch, J. J. (1979). *The broken heart: The medical consequences of loneliness*. New York: Basic Books.
- Mann, L. (1980). Cross-cultural studies of small groups. In H. Triandis & R. Brislin (Eds.), *Handbook of cross-cultural psychology: Social psychology* (Vol. 5, pp. 155–209). Boston: Allyn & Bacon.
- Manucia, G. K., Baumann, D. J., & Cialdini, R. B. (1984). Mood influences on helping: Direct effects or side effects? *Journal of Personality and Social Psychology*, 46, 357–364.
- Maslow, A. H. (1968). *Toward a psychology of being*. New York: Van Nostrand.
- Masserman, J. H., Wechkin, S., & Terris, W. (1964). "Altruistic" behavior in rhesus monkeys. *American Journal of Psychiatry*, 121, 584–585.
- Mathes, E. W., Adams, H. E., & Davies, R. M. (1985). Jealousy: Loss of relationship rewards, loss of self-esteem, depression, anxiety, and anger. *Journal of Personality and Social Psychology*, 48, 1552–1561.
- May, J. L., & Hamilton, P. A. (1980). Effects of musically evoked affect on women's interpersonal attraction and perceptual judgments of physical attractiveness of men. *Motivation and Emotion*, 4, 217–228.
- McAdams, D. P. (1985). Motivation and friendship. In S. Duck & D. Perlman (Eds.), *Understanding personal relationships: An interdisciplinary approach* (pp. 85–105). Beverly Hills, CA: Sage.
- McAdams, D. P., & Bryant, F. B. (1987). Intimacy motivation and subjective mental health in a nationwide sample. *Journal of Personality*, 55, 395–413.
- McCauley, C. R., & Segal, M. E. (1987). Social psychology of terrorist groups. In C. Hendrick (Ed.), *Group processes and intergroup relations: Review of personality and social psychology* (Vol. 9, pp. 231–256). Newbury Park, CA: Sage.
- McLeod, E. (1982). *Women working: Prostitution today*. London: Croom Helm.
- Meindl, J. R., & Lerner, M. J. (1984). Exacerbation of extreme responses to an out-group. *Journal of Personality and Social Psychology*, 47, 71–84.
- Miceli, M. (1992). How to make someone feel guilty: Strategies of guilt inducement and their goals. *Journal for the Theory of Social Behaviour*, 22, 81–104.
- Mijuskovic, B. (1980). Loneliness: An interdisciplinary approach. In J. Hartog, J. R. Audy, & Y. A. Cohen (Eds.), *The anatomy of loneliness* (pp. 65–94). New York: International Universities Press.
- Milardo, R. M., Johnson, M. P., & Huston, T. L. (1983). Developing close relationships: Changing patterns of interaction between pair members and social networks. *Journal of Personality and Social Psychology*, 44, 964–976.
- Miller, N. B., Cowan, P. A., Cowan, C. P., Hetherington, E. M., & Clingempeel, W. G. (1993). Externalizing in preschoolers and early adolescents: A cross-study replication of a family model. *Developmental Psychology*, 29, 3–18.
- Miller, R. S., & Leary, M. R. (1992). Social sources and interactive functions of emotion: The case of embarrassment. In M. Clark (Ed.), *Review of personality and social psychology*, Vol. 14: *Emotion and social behavior* (pp. 202–221). Newbury Park, CA: Sage.
- Monson, T. C., Keel, R., Stephens, D., & Genung, V. (1982). Trait attributions: Relative validity, covariation with behavior, and prospect of future interaction. *Journal of Personality and Social Psychology*, 42, 1014–1024.
- Moreland, R. L. (1987). The formation of small groups. In C. Hendrick (Ed.), *Group processes: Review of personality and social psychology* (Vol. 8, pp. 80–110). Newbury Park, CA: Sage.

- Moreland, R. L., & Levine, J. M. (1989). Newcomers and oldtimers in small groups. In P. Paulus (Ed.), *Psychology of group influence* (Vol. 2, pp. 143–186). Hillsdale, NJ: Erlbaum.
- Morgenthau, H. (1962). Love and power. *Commentary*, 33, 247–251.
- Morris, D. R. (1965). *The washing of the spears: The rise and fall of the Zulu nation*. New York: Simon & Schuster.
- Myers, D. (1992). *The pursuit of happiness*. New York: Morrow.
- Nahemow, L., & Lawton, M. P. (1975). Similarity and propinquity in friendship formation. *Journal of Personality and Social Psychology*, 32, 205–213.
- O'Grady, K. E. (1989). Physical attractiveness, need for approval, social self-esteem, and maladjustment. *Journal of Social and Clinical Psychology*, 8, 62–69.
- Olmos, E. (Producer). (1994, April 8). *Lives in hazard*. New York: National Broadcasting Company.
- Orbell, J. M., van de Kragt, A., & Dawes, R. M. (1988). Explaining discussion-induced cooperation. *Journal of Personality and Social Psychology*, 54, 811–819.
- Ostrom, T. M., Carpenter, S. L., Sedikides, C., & Li, F. (1993). Differential processing of in-group and out-group information. *Journal of Personality and Social Psychology*, 64, 21–34.
- Paloutzian, R. F., & Janigan, A. S. (1987). Models and methods in loneliness research: Their status and direction. In M. Hoja & R. Crandall (Eds.), *Loneliness: Theory, research, and applications* (pp. 31–36). San Rafael, CA: Select Press.
- Panksepp, J., Siviy, S. M., & Normansell, L. A. (1985). Brain opioids and social emotions. In M. Reite & T. Field (Eds.), *The psychobiology of attachment and separation* (pp. 3–49). New York: Academic Press.
- Pearce, P. L. (1980). Strangers, travelers, and Greyhound terminals: A study of small-scale helping behaviors. *Journal of Personality and Social Psychology*, 38, 935–940.
- Pearlman, C. A. (1970). Separation reactions of married women. *American Journal of Psychiatry*, 126, 946–950.
- Perlman, D. (1987). Further reflections on the present state of loneliness research. In M. Hoja & R. Crandall (Eds.), *Loneliness: Theory, research, and applications* (pp. 17–26). San Rafael, CA: Select Press.
- Perloff, L. S., & Fetzer, B. K. (1986). Self-other judgments and perceived vulnerability to victimization. *Journal of Personality and Social Psychology*, 50, 502–510.
- Pines, M., & Aronson, E. (1983). Antecedents, correlates, and consequences of sexual jealousy. *Journal of Personality*, 51, 108–135.
- Price, S. J., & McKenry, P. C. (1988). *Divorce*. Beverly Hills, CA: Sage.
- Pryor, J. M., & Ostrom, T. M. (1981). The cognitive organization of social life: A converging-operations approach. *Journal of Personality and Social Psychology*, 41, 628–641.
- Rabbie, J. M., & Horwitz, M. (1969). Arousal of ingroup-outgroup bias by a chance win or loss. *Journal of Personality and Social Psychology*, 13, 269–277.
- Reis, H. T. (1990). The role of intimacy in interpersonal relations. *Journal of Social and Clinical Psychology*, 9, 15–30.
- Reis, H. T., Wheeler, L., Kernis, M. H., Spiegel, N., & Nezlek, J. (1985). On specificity in the impact of social participation on physical and psychological health. *Journal of Personality and Social Psychology*, 48, 456–471.
- Reiss, I. L. (1986). A sociological journey into sexuality. *Journal of Marriage and the Family*, 48, 233–242.
- Rofe, Y. (1984). Stress and affiliation: A utility theory. *Psychological Review*, 91, 235–250.
- Rogers, C. R. (1959). A theory of therapy, personality, and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science* (Vol. 3, pp. 184–256). New York: McGraw-Hill.
- Rook, K. S. (1987a). Reciprocity of social exchange and social satisfaction among older women. *Journal of Personality and Social Psychology*, 52, 145–154.
- Rook, K. S. (1987b). Social support versus companionship: Effects on life stress, loneliness, and evaluations by others. *Journal of Personality and Social Psychology*, 52, 1132–1147.
- Rosen, R. (1979). Some crucial issues concerning children of divorce. *Journal of Divorce*, 3, 19–25.
- Rosen, S., Mickler, S. E., & Collins, J. E. (1987). Reactions of would-be helpers whose offer of help is spurned. *Journal of Personality and Social Psychology*, 53, 288–297.
- Rosenberg, T. (1991). *Children of Cain: Violence and the violent in Latin America*. New York: Penguin Books.
- Ross, C. (1976). *The Wars of the Roses: A concise history*. New York: Thames & Hudson.
- Rothberg, J. M., & Jones, F. D. (1987). Suicide in the U.S. Army: Epidemiological and periodic aspects. *Suicide and Life-Threatening Behavior*, 17, 119–132.
- Roy, M. (Ed.). (1977). *Battered women*. New York: Van Nostrand.
- Ruehlman, L. S., & Wolchik, S. A. (1988). Personal goals and interpersonal support and hindrance as factors in psychological distress and well-being. *Journal of Personality and Social Psychology*, 55, 293–301.
- Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, 16, 172–186.
- Rusbult, C. E., Verette, J., & Drigotus, S. M. (1994). *Absolute commitment level, mutuality of commitment, and couple adjustment in marital relationships*. Unpublished manuscript, University of North Carolina at Chapel Hill.
- Rusbult, C. E., Zembrodt, I. M., & Gunn, L. K. (1982). Exit, voice, loyalty, and neglect: Responses to dissatisfaction in romantic involvements. *Journal of Personality and Social Psychology*, 43, 1230–1242.
- Russell, D., Cutrona, C., Rose, J., & Yurko, K. (1984). Social and emotional loneliness: An examination of Weiss's typology of loneliness. *Journal of Personality and Social Psychology*, 46, 1313–1321.
- Rutkowski, G. K., Gruder, C. L., & Romer, D. (1983). Group cohesiveness, social norms, and bystander intervention. *Journal of Personality and Social Psychology*, 44, 545–552.
- Rutter, M. (1979). Maternal deprivation, 1972–1978: New findings, new concepts, new approaches. *Child Development*, 50, 283–305.
- Rutter, M., & Garmezy, N. (1983). Developmental psychopathology. In E. M. Hetherington (Ed.), *Handbook of child psychology* (Vol. 4, pp. 775–911). New York: Wiley.
- Ryan, R. M. (1991). The nature of the self in autonomy and relatedness. In J. Strauss & G. R. Goethals (Eds.), *The self: Interdisciplinary approaches* (pp. 208–238). New York: Springer-Verlag.
- Saklofske, D. H., & Yackulic, R. A. (1989). Personality predictors of loneliness. *Personality and Individual Differences*, 10, 467–472.
- Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.
- Sarbin, T. (1982). The dangerous individual: An outcome of social identity transformations. In V. L. Allen & K. E. Scheibe (Eds.), *The social context of conduct* (pp. 113–118). New York: Pergamon Press.
- Schachter, S. (1951). Deviance, rejection, and communication. *Journal of Abnormal and Social Psychology*, 46, 190–207.
- Schachter, S. (1959). *The psychology of affiliation*. Stanford, CA: Stanford University Press.
- Schlenker, B. R. (1980). *Impression management: The self-concept, social identity, and interpersonal relations*. Monterey, CA: Brooks/Cole.
- Schoenrade, P. A., Batson, C. D., Brandt, J. R., & Loud, R. E. (1986). Attachment, accountability, and motivation to benefit another not in distress. *Journal of Personality and Social Psychology*, 51, 557–563.



- Scudder, K. J. (1952). *Prisoners are people*. Garden City, NY: Doubleday.
- Sedikides, C., Olsen, N., & Reis, H. T. (1993). Relationships as natural categories. *Journal of Personality and Social Psychology*, 64, 71–82.
- Shaver, P., & Buhrmester, D. (1983). Loneliness, sex-role orientation, and group life: A social needs perspective. In P. Paulus (Ed.), *Basic group processes* (pp. 259–288). New York: Springer-Verlag.
- Shaver, P., Hazan, C., & Bradshaw, D. (1988). Love as attachment: The integration of three behavioral systems. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 68–99). New Haven, CT: Yale University Press.
- Shepperd, J. A., & Arkin, R. M. (1990). Shyness and self-presentation. In W. R. Crozier (Ed.), *Shyness and embarrassment: Perspectives from social psychology* (pp. 286–314). Cambridge, England: Cambridge University Press.
- Sherif, M., Harvey, O. H., White, B. J., Hood, W. R., & Sherif, C. W. (1988). *The Robbers Cave experiment: Intergroup conflict and cooperation*. Middletown, CT: Wesleyan University Press. (Original work published 1961)
- Snyder, A. I. (1978). Periodic marital separation and physical illness. *American Journal of Orthopsychiatry*, 48, 637–643.
- Snyder, C. R., Higgins, R. L., & Stucky, R. J. (1983). *Excuses: Masquerades in search of grace*. New York: Wiley.
- Solomon, Z., Waysman, M., & Mikulincer, M. (1990). Family functioning, perceived social support, and combat-related psychopathology: The moderating role of loneliness. *Journal of Social and Clinical Psychology*, 9, 456–472.
- Sours, J. A. (1974). The anorexia nervosa syndrome. *International Journal of Psychoanalysis*, 55, 567–576.
- Spanier, G. B., & Casto, R. F. (1979). Adjustment to separation and divorce: A qualitative analysis. In G. Levinger & O. C. Moles (Eds.), *Divorce and separation: Context, causes, and consequences* (pp. 211–227). New York: Basic Books.
- Spanier, G. B., & Lewis, R. A. (1980). Marital quality: A review of the seventies. *Journal of Marriage and the Family*, 42, 825–839.
- Spivey, E. (1990). *Social exclusion as a common factor in social anxiety, loneliness, jealousy, and social depression*. Unpublished master's thesis, Wake Forest University, Winston-Salem, NC.
- Stark, R., & Bainbridge, W. S. (1985). *The future of religion: Secularization, revival, and cult formation*. Berkeley: University of California Press.
- Staub, E. (1989). *The roots of evil: The origins of genocide and other group violence*. Cambridge, England: Cambridge University Press.
- Staw, B. M., Sandelands, D. E., & Dutton, J. E. (1981). Threat-rigidity effects in organizational behavior: A multi-level analysis. *Administrative Science Quarterly*, 26, 501–524.
- Stein, A. A. (1976). Conflict and cohesion: A review of the literature. *Journal of Conflict Resolution*, 20, 143–172.
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, 93, 119–135.
- Strube, M. J. (1988). The decision to leave an abusive relationship: Empirical evidence and theoretical issues. *Psychological Bulletin*, 104, 236–250.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Symanski, R. (1980). Prostitution in Nevada. In E. Muga (Ed.), *Studies in prostitution* (pp. 246–279). Nairobi, Kenya: Kenya Literature Bureau.
- Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American*, 223, 96–102.
- Tajfel, H., & Billig, M. (1974). Familiarity and categorization in intergroup behavior. *Journal of Experimental Social Psychology*, 10, 159–170.
- Tajfel, H., Flament, C., Billig, M. G., & Bundy, R. F. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, 1, 149–177.
- Tambor, E. S., & Leary, M. R. (1993). *Perceived exclusion as a common factor in social anxiety, loneliness, jealousy, depression, and low self-esteem*. Manuscript submitted for publication.
- Tangney, J. P. (1992). Situational determinants of shame and guilt in young adulthood. *Personality and Social Psychology Bulletin*, 18, 199–206.
- Tesser, A. (1991). Emotion in social comparison and reflection processes. In J. Suls & T. A. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 117–148). Hillsdale, NJ: Erlbaum.
- Tesser, A., Millar, M., & Moore, J. (1988). Some affective consequences of social comparison and reflection processes: The pain and pleasure of being close. *Journal of Personality and Social Psychology*, 54, 49–61.
- Tice, D. M., Butler, J. L., Muraven, M. B., & Stillwell, A. M. (1994). *When modesty prevails: Differential favorability of self-presentation to friends and strangers*. Manuscript submitted for publication.
- Toch, H. (1975). *Men in crisis*. Chicago: Aldine.
- Toch, H. (1977). *Living in prison: The ecology of survival*. New York: Free Press.
- Toch, H. (1992). *Violent men*. Washington, DC: American Psychological Association.
- Toi, M., & Batson, C. D. (1982). More evidence that empathy is a source of altruistic motivation. *Journal of Personality and Social Psychology*, 43, 281–292.
- Trout, D. L. (1980). The role of social isolation in suicide. *Suicide and Life-Threatening Behavior*, 10, 10–23.
- Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Ed.), *Advances in group processes: Theory and research* (Vol. 2, pp. 77–121). Greenwich, CT: JAI Press.
- Vallacher, R. R., & Nowak, A. (1994). The chaos in social psychology. In R. Vallacher & A. Nowak (Eds.), *Dynamical systems in social psychology* (pp. 1–16). San Diego, CA: Academic Press.
- Vangelisti, A. L., Daly, J. A., & Rudnick, J. R. (1991). Making people feel guilty in conversations: Techniques and correlates. *Human Communication Research*, 18, 3–39.
- Vaughan, D. (1986). *Uncoupling*. New York: Oxford University Press.
- Vaux, A. (1988). Social and emotional loneliness: The role of social and personal characteristics. *Personality and Social Psychology Bulletin*, 14, 722–734.
- Veitch, R., & Griffitt, W. (1976). Good news, bad news: Affective and interpersonal effects. *Journal of Applied Social Psychology*, 6, 69–75.
- Vinokur, A. D., & van Ryn, M. (1993). Social support and undermining in close relationships: Their independent effects on mental health of unemployed persons. *Journal of Personality and Social Psychology*, 65, 350–359.
- Wade, W. C. (1987). *The fiery cross: The Ku Klux Klan in America*. New York: Touchstone/Simon & Schuster.
- Wegner, D. M. (1986). Transactive memory: A contemporary analysis of the group mind. In B. Mullen & G. R. Goethals (Eds.), *Theory of group behavior* (pp. 185–208). New York: Springer-Verlag.
- Wegner, D. M., Erber, R., & Raymond, P. (1991). Transactive memory in close relationships. *Journal of Personality and Social Psychology*, 61, 923–929.
- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA: MIT Press.
- Weiss, R. S. (1979). The emotional impact of marital separation. In G. Levinger & O. C. Moles (Eds.), *Divorce and separation: Context, causes, and consequences* (pp. 201–210). New York: Basic Books.
- West, S., Newsom, J. T., & Fenaughty, A. M. (1992). Publication trends in *Journal of Personality and Social Psychology*: Stability and change

in topics, methods, and theories across two decades. *Personality and Social Psychology Bulletin*, 18, 473-484.

Wheeler, L., & Nezlek, J. (1977). Sex differences in social participation. *Journal of Personality and Social Psychology*, 35, 742-754.

Wheeler, L., Reis, H. T., & Nezlek, J. (1983). Loneliness, social interaction, and sex roles. *Journal of Personality and Social Psychology*, 45, 943-953.

Wilbur, J. R., & Wilbur, M. (1988). The noncustodial parent: Dilemmas and interventions. *Journal of Counseling and Development*, 66, 434-437.

Wilder, D. A., & Thompson, J. E. (1980). Intergroup contact with independent manipulations of in-group and out-group interaction. *Journal of Personality and Social Psychology*, 38, 589-603.

Williams, J. G., & Solano, C. H. (1983). The social reality of feeling lonely: Friendship and reciprocation. *Personality and Social Psychology Bulletin*, 9, 237-242.

Winfield, F. E. (1985). *Commuter marriage*. New York: Columbia University Press.

Yalom, I. (1985). *The theory and practice of group psychotherapy*. New York: Basic Books.

Zander, A. (1971). *Motives and goals in groups*. New York: Academic Press.

Received August 27, 1993  
 Revision received November 4, 1994  
 Accepted November 7, 1994 ■



**AMERICAN PSYCHOLOGICAL ASSOCIATION  
 SUBSCRIPTION CLAIMS INFORMATION**

Today's Date: \_\_\_\_\_

We provide this form to assist members, institutions, and nonmember individuals with any subscription problems. With the appropriate information we can begin a resolution. If you use the services of an agent, please do NOT duplicate claims through them and directly to us. **PLEASE PRINT CLEARLY AND IN INK IF POSSIBLE.**

PRINT FULL NAME OR KEY NAME OF INSTITUTION	MEMBER OR CUSTOMER NUMBER (MAY BE FOUND ON ANY PAST ISSUE LABEL)	
ADDRESS	DATE YOUR ORDER WAS MAILED (OR PHONED)	
CITY STATE/COUNTRY ZIP	<input type="checkbox"/> PREPAID <input type="checkbox"/> CHECK <input type="checkbox"/> CHARGE CHECK/CARD CLEARED DATE: _____	
YOUR NAME AND PHONE NUMBER	(If possible, send a copy, front and back, of your cancelled check to help us in our research of your claim.) ISSUES: <input type="checkbox"/> MISSING <input type="checkbox"/> DAMAGED	
TITLE	VOLUME OR YEAR	NUMBER OR MONTH

*Thank you. Once a claim is received and resolved, delivery of replacement issues routinely takes 4-6 weeks.*

(TO BE FILLED OUT BY APA STAFF)

DATE RECEIVED: _____	DATE OF ACTION: _____
ACTION TAKEN: _____	INV. NO. & DATE: _____
STAFF NAME: _____	LABEL NO. & DATE: _____

Send this form to APA Subscription Claims, 750 First Street, NE, Washington, DC 20002-4242

**PLEASE DO NOT REMOVE. A PHOTOCOPY MAY BE USED.**