
Perceived benefits and costs of romantic relationships for women and men: Implications for exchange theory

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Abstract

This investigation examined the perceived benefits and costs of romantic (i.e., reciprocal dating) relationships. In Study 1, subjects provided open-ended reports regarding the benefits and costs associated with romantic involvement. Different groups of subjects ranked (Study 2) and rated (Study 3) these benefits and costs for importance. Companionship, happiness, and feeling loved or loving another were among the most important benefits accompanying romantic involvement. The most serious costs included stress and worry about the relationship, social and nonsocial sacrifices, and increased dependence on the partner. Compared to males, females regarded intimacy, self-growth, self-understanding, and positive self-esteem as more important benefits, and regarded loss of identity and innocence about relationships and love as more important costs. Alternatively, males regarded sexual gratification as a more important benefit, and monetary losses as a more serious cost than did females. Implications for exchange theory are highlighted.

Involvement in romantic (i.e., reciprocal dating) relationships is considered one of the most important tasks of early adulthood and is assumed to change the individual in profound ways (Erikson, 1963; Levinson, Darrow, Klein, Levinson, & McKee, 1978). Surprisingly, however, little is known about individuals' subjective perceptions of changes that romantic relationships presumably bestow upon them. The present investigation explored these changes by assessing the perceived benefits and costs that romantic relationships entail for the individual. The investigation extended prior re-

search in this area by *empirically* exploring the *content* of costs and benefits (rather than their regulation only), by focusing on *romantic* relationships specifically (rather than on general relationships), and by examining impacts on *individuals'* perceptions (rather than on general relationship satisfaction). Because of the possibility of differential consequences of romantic involvement for women and men, this investigation additionally examined gender differences) in relationship benefits and costs.

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1. A great deal of debate has taken place over the appropriate use of the terms "gender differences" versus "sex differences" (e.g., Deaux, 1993; Gentile, 1993; Unger, 1979; Unger & Crawford, 1992, 1993). Following the suggestion of Unger (1979), we opted for the term "gender differences," given that "the use of the term *gender* makes it less likely that psychological differences between males and females will be considered explicable mainly in terms of physiological differences between them" (p. 1093; italics in the original).

Consequences of Romantic Involvement

Past theorizing and research

Romantic involvement clearly encompasses benefits and costs, as recognized by several theoretical formulations adopting an exchange perspective (Adams, 1965; Aronson, 1969; Blau, 1967; Homans, 1961; Kelley & Thibaut, 1978; Lott & Lott, 1974; Mills & Clark, 1982). Consider a study by Clark (1981), which investigated subjects' beliefs regarding the comparability of benefits and costs that result from exchange versus communal relationships. Clark re-reported that comparability of benefits led to the inference that an exchange relationship existed, whereas noncomparability of benefits led to the inference that a communal relationship was present. As is evident from the description of this study, exchange perspectives focus on rules and expectations that regulate the giving and receiving of benefits rather than the subjectively construed *content* of benefits and costs. Furthermore, exchange perspectives are applicable to social relationships in general rather than being exclusively concerned with *romantic* relationships. Similar appraisals apply to the role expectations perspective (Parsons & Shils, 1951), the social motives perspective (MacCrimmon & Messick, 1976; Schultz & May, 1989), and the theory of relational models (Fiske, 1991; Fiske, Haslam, & Fiske, 1991).

Foa and Foa's (1974, 1980; see also Foa, Converse, Tornblom, & Foa, 1993) resource exchange theory does focus on the content of the exchange by identifying six resources: love, status, information, money, goods, and services. However, this theory was also intended to be a general theory of social relationships rather than being concerned with the specifics of romantic relationships. In addition, this theory and relevant research does not generally approach its subject matter from the viewpoint of *subjective* construals of relationship benefits and costs (for an exception, see Rettig, Danes, & Bauer, 1993).

Some investigations have concentrated on the content of exchange resources as applied to romantic (mostly marital) relationships. For example, Safilios-Rothschild (1976) reported seven resources that are potentially exchanged between spouses: socioeconomic, affective, expressive, companionship, sex, services, and power in relationships. Sprecher (1985) modified the Safilios-Rothschild list by replacing the resource "power in relationships" with the resources "physical appearance" and "intellectual." However, these lists were based on researcher intuition rather than being derived from subjects' own accounts, and the perceived importance (and, most notably, the perceived relative importance) of the exchange resources for the individual was not tested empirically.

Van Yperen and Buunk (1990) created a list of 144 "exchange elements," later reduced to 24 through factor analysis. Subjects were then asked to "indicate whether each of these elements was a positive, negative, or no contribution to an intimate relationship" (p. 293), and these ratings of the exchange elements were then compared to a global assessment of equity. These researchers found that the most important positive contributions to a relationship were being committed to it, being sociable and pleasant to be with, leading an interesting and varied life, and taking care of the children. The most negative contributions to a relationship were being suspicious and jealous, being addicted to tobacco and/or alcohol, and being unfaithful. Although Van Yperen and Buunk's study provided useful information concerning contributions to relationships, their research differs from the present investigation in two primary ways. First, Van Yperen and Buunk were interested in contributions of exchange elements to *relationship satisfaction* rather than the benefits and costs that relationships incur upon the individual. Second, the list of exchange elements employed in their study was researcher-derived rather than subject-derived.

Sternberg and Wright (described in Sternberg, 1987) divided their sample into

three groups depending on the length of their current intimate relationship (short-term, medium-term, and long-term) and asked subjects (among other questions) about "what attributes of a relationship . . . males and females view as *important* for the success of an intimate relationship at different points in the relationship." Sternberg and Wright's results are rather difficult to evaluate, however, because the description of their study and findings was unusually brief. For example, no explanation was provided as to how the attributes were derived from subjects' reports, what scales subjects used to rate these attributes, and how the data were analyzed.

In addition to the aforementioned studies, several theoretical statements have also attempted to delineate the content of benefits and costs that accompany romantic relationships. Hypothesized benefits of romantic involvement include assistance in everyday tasks, coping with stressful life events, material support, suggestions for effective behavioral regulation, and satisfaction of crucial psychological needs such as intimacy, power, social integration and alliance, being nurturant, and reassurance of one's own worth (Duck, 1991; McAdams, 1984, 1988; Rook & Pietromonaco, 1987; Weiss, 1969, 1974). Hypothesized costs of romantic relationships include ineffective or excessive help, unwanted or unpleasant interactions such as invasions of privacy and criticisms (Rook & Pietromonaco, 1987), fear of exposure, fear of abandonment, angry attacks, and loss of individuality (Hatfield, 1984). However, these theoretical statements (which were based on researcher intuition, clinical observation, or both) were not followed up by empirical tests.

Contributions of the present investigation

The present investigation extends past theorizing and research in several noteworthy ways. First, this investigation focuses on *subjective construals* of relationship benefits and costs. Subjective construals are operationalized as subjects' retrospective (and,

unavoidably, reconstructive) reports of the benefits and costs associated with their past and present relationships. Second, the investigation is concerned exclusively with *romantic relationships*. Third, the investigation is interested in the *content* of benefits and costs. Although past research incorporated a subset of the above three contributions, not a single study has subsumed all three contributions simultaneously. Finally, this investigation adds uniquely to the literature in going beyond a simple list of benefits and costs and instead focusing on the *relative* importance of these benefits and costs for the individual. Research has yet to identify what benefits and costs are *most and least important* to romantically involved individuals.

As mentioned above, the current investigation is concerned with the content and relative importance of perceived benefits and costs. Why is this endeavor worthwhile? We think it is worthwhile for several reasons. One reason is that this concern addresses a serious analytical shortcoming of exchange theory—namely the failure to specify the conceptual dimensions of benefits and costs. In much of the exchange literature, benefits and costs are specified on an ad hoc or study-by-study basis. Arguably, then, exchange theory remains tautological and thus incapable of empirical falsification. Advances in operationalizing (and interpreting others' operationalizations of) benefits and costs are clearly needed.² A second reason is that knowledge of benefits and costs of romantic involvement may increase understanding of the expectancies that individuals bring to relationships, which may in turn affect relationship satisfaction. A third reason is that this endeavor may contribute to a better un-

2. Berg and his colleagues (Berg & McQuinn, 1986; Berg, Piner, & Frank, 1993) developed a model composed of four hypotheses that predict resource exchange in close and nonclose relationships. Hypothesis 2 states that the resources exchanged in close relationships will be more particularistic than the resources exchanged in nonclose relationships. The present investigation can be thought of as an attempt to find out what exactly those particularistic resources are.

derstanding of why individuals enter and re-main in romantic relationships. Stated otherwise, this endeavor will address empirically the link between motivation and romantic relationships. Finally, this endeavor is likely to have applied implications; that is, the results may provide useful information such for professionals as marital therapists and policy planners in terms of the benefits and costs that currently matter in our culture.

Gender Differences in Perceived Benefits and Costs

Undoubtedly, accounts of perceived benefits and costs of romantic relationships will vary among individuals. Predicting the relative importance of benefits or seriousness of costs, therefore, is a complex task involving numerous variables, some of which may be difficult to identify. Nevertheless, research on romantic and sexual attitudes and beliefs suggests that gender may be one such predictor.

Incorporating gender as an attribute variable can easily raise controversy: Gender is often confounded with other variables, it is difficult to determine the causes behind any apparent gender differences, and it is statistically impossible to prove a null hypothesis that asserts gender similarities (for a review, see Jacklin, 1981). Despite these difficulties, though, an interest in the question of gender differences on the part of scholars has led to a substantial body of past research in the area of romantic beliefs and experiences. Males score higher than do females on measures of romanticism (e.g., love at first sight) and females approach relationships with a more pragmatic orientation than do males (Fengler, 1974; Peplau & Gordon, 1985; Rubin, Peplau, & Hill, 1981; Sprecher & Metts, 1989). Conversely, males score higher on measures that indicate "game-playing" or "uncommitted" orientations to romantic relationships (e.g., preferring freedom to interact with multiple partners), whereas females report higher levels of "passion" once a relationship has developed

and experience more intense positive and negative symptoms or emotional responses (Dion & Dion, 1985; Hatfield, 1983; Hendrick & Hendrick, 1987; Wood, Rhodes, & Whelan, 1989).

These gender differences in romantic beliefs and experiences may be associated with differences in the importance that females and males place on intimacy and sexuality. If women place greater emphasis on intimacy than do men, one would expect women to experience greater feelings of euphoria when intimacy is achieved, and greater feelings of disappointment when intimacy is endangered. Alternatively, if men place greater emphasis on sexuality than do women, men should experience greater satisfaction and disappointment in reaction to sexual gratification and frustration, respectively. Consistent with these predictions, Levinger (1964; see also Sprecher & Sedikides, 1993) reported that communication was a stronger predictor of global marital satisfaction for wives than for husbands, whereas sexual satisfaction was a stronger predictor for husbands than for wives.

Gender differences in the importance of intimacy and sexuality have been illustrated in studies concerning emotional contexts in which sexual activity occurs. In general, it appears that whereas men experience and enjoy sexual intercourse in relationships at various levels of emotional commitment, women's sexual activities tend to be experienced and enjoyed most often in relationships involving commitment or, at least, emotional attachment (McCabe, 1987; Sack, Keller, & Hinkle, 1981). Based on their survey of college students regarding sexual attitudes and behaviors, Carroll, Volk, and Hyde (1985) concluded that "Male motives more often include pleasure, fun, and physical reasons, whereas females' motives include love, commitment, and emotion" (p. 136).

Gender differences in orientations toward romantic relationships can also be found in research examining the attributes of romantic partners that males and females rate as important. Overall, this literature

supports the idea that females tend to place a greater emphasis on intimacy than do males (e.g., rating qualities such as "warmth" as more important) and to be more pragmatic in their orientations (e.g., rating qualities such as "financial security" as more important), and that males tend to place a greater emphasis on sexuality than do females (e.g., rating "physically attractive" or "sexy" as more important; Buss & Barnes, 1986; Dindia & Allen, 1992; Howard, Blumstein, & Schwartz, 1987; Laner, 1977; Nevid, 1984; Simpson & Gangestad, 1992).

Based on the above literature, several predictions can be generated. First, gender differences in intimacy suggest that females may be more likely than males to consider love, communication, affection, and increases in love, sharing, or understanding as important benefits of involvement.

Alternatively, gender differences in sexuality and "game-playing" orientations imply that males may be more likely than females to regard sexual activity or sexual gratification as more important benefits, and monogamy or lack of freedom as more serious costs.

Second, given females' higher scores on measures of passionate experiences, one might also expect that females would perceive feelings of passion or joy as more important benefits than males, with these benefits, in turn, likely to be associated with perceived positive changes in self-evaluation (Long, 1989). On the other hand, these gender differences on symptoms of love may exacerbate gender differences in anxiety in response to relational difficulties, leading females to perceive the cost of worry about the relationship as more serious, possibly associated with perceived negative changes in self-evaluation.

Overview

The purpose of this investigation was to explore the perceived benefits and costs of romantic involvement. In addition, because the importance placed on benefits and costs is likely to vary according to gender, differ-

ences between males and females were also explored, with primary differences expected in the areas associated with intimacy and sexuality.

The investigation adopted a converging operations approach (Garner, Hake, & Eriksen, 1956; Pryor & Ostrom, 1981; Srull, 1984). This approach recognizes that the findings of any single study are open to the criticism that the results are due to the particular methodological procedure used rather than the effects of variables of interest. Hence, this approach advocates the use of multiple methodological procedures to investigate the same phenomenon.

In Study 1, subjects provided open-ended accounts of the benefits and costs that accompany involvement in romantic relationships. The objective of Study 2 was to cross-validate the results of Study 1 by using the *ipsative method* (e.g., Buss & Barnes, 1986, Study 2; Hendel, 1978), according to which categories are ranked for a specified criterion. In Study 2, subjects rank-ordered the importance or seriousness of the benefits and costs generated in Study 1. Finally, to cross-validate the results of the previous two studies, Study 3 employed a *normative method*, according to which categories are rated on a specified criterion (Buss & Barnes, 1986, Study 1; Howard et al., 1987). In this study, subjects rated the categories on importance or seriousness.

Study 1 Methods

Subjects

Subjects were 70 females and 59 males. In this and the following two studies, subjects were (1) heterosexual, University of Wisconsin-Madison undergraduates participating for extra introductory psychology credit, (2) involved in at least two past relationships, and (3) involved at the time of this investigation in a new (i.e., at least their third) romantic relationship.

We used exclusively heterosexual subjects because we wanted to build on past literature that focused on heterosexuals (an

additional 24 subjects were not used in our three studies because they reported being homosexual). We used the subject selection criterion of at least three romantic relationships because we considered this criterion to be sufficient for producing credible introspective reports regarding the consequences of romantic involvement.

All studies in this investigation were conducted in small groups (three to eight individuals per group), with each subject seated at a desk separated by partitions. Each group was run by one of three (two females and one male) research assistants.

Materials and procedure

Subjects in Study 1 were escorted to the laboratory, seated, and handed a booklet. The first page of the booklet explained that the subjects would be asked several questions about their romantic relationships and that their answers would be kept anonymous and confidential. Next, subjects indicated their gender.

On the next page of the booklet, subjects were given the following instructions: "Romantic relationships are likely to result in both benefits and costs. Please list the five most important benefits you enjoyed and the five most serious costs you suffered as a result of all of your romantic relationships." Subjects listed benefits and costs in boxes provided on the next two pages, with the order of the benefits and costs pages presented randomly to each subject. Upon completion of the booklet, subjects were de-briefed, thanked for their participation, and excused.

Coding

Two undergraduate student judges (one female and one male) independently read through subjects' answers. These answers were made available to the judges in different random orders, with the subjects' gender being concealed. Judges created response-based coding categories for each of the two tasks (i.e., benefits and costs) that subjects

completed. Judges agreed on 79% of the categories created for benefits and on 81% of the categories created for costs. Judges re-solved disagreements through discussion. Next, judges independently coded subjects' responses into the agreed-upon categories. *Cohen's Kappa's* ranged from .76 to .92 for the benefits categories, and from .74 to .91 for the costs categories. Judges settled their discrepancies through deliberation.

Results

Data analytic strategy

Each task was analyzed using a Task (i.e., benefits or costs) \times Gender mixed-subjects Analysis of Variance (ANOVA) with Task as the repeated-measures factor. Consequently, the dependent variable for the first analysis was the relative frequency that 12 different types of benefits were mentioned, and the dependent variable for the second analysis was the relative frequency that 12 different types of costs were mentioned. Main effects for costs or benefits indicate differences in frequency of mention, and interactions with gender indicate differences in frequency of mention between males and females. The significance levels for these within-subjects effects (i.e., Task main effects, and Task \times Gender interactions) were based on the Geisser-Greenhouse correction. (For sources advocating the use of ANOVA procedures to analyze frequency data, see Cochran, 1947; Hsu & Feldt, 1969; Lunney, 1970; and Pearson, 1931.) Because of space limitations, only highlights of the obtained results will be presented in the text, with a more comprehensive picture of the findings being available in the tables. Categories and responses are provided in Tables 1 and 2 for the two tasks, with the first column reporting overall response frequencies, the second and third columns reporting response frequencies for females and males, respectively, and the final column reporting t-statistics for gender differences associated with each response.

Benefits

Benefits stemming from romantic involvement were classified into 12 categories. The Benefits main effect was significant, $F(11, 1397) = 33.50, p < .0001$ (Table 1). Companionship or affiliation was mentioned by 60% of the subjects—significantly more often than any other benefit. The next most commonly listed benefits were sexual gratification (46%), feeling loved or loving another (43%), intimacy (42%), and expertise in relationships (40%). Not one of the last four benefits was mentioned with significantly different frequency.

A Gender x Benefits interaction, $F(11, 1397) = 13.53, p < .0001$, revealed that a significantly larger percentage of males (65%) than females (26%) mentioned that sexual gratification was an important benefit of romantic involvement, whereas a significantly larger percentage of females (49%) than males (14%) mentioned more positive self-esteem. (The Gender main effect was not significant, $F(1,127) = .11, p < .74$.)

Costs

Table 2 reports the 12 categories used to classify the costs mentioned. A Costs main effect, $F(11, 1397) = 93.13, p < .0001$, indicated that the most frequently mentioned costs (and the only ones mentioned by more than 30% of the subjects) were lack of freedom to socialize (69%) and lack of freedom to date (68%).

A significant Gender x Costs interaction was also obtained, $F(11, 1397) = 9.74, p < .0001$. Although both females and males re-reported lack of freedom to socialize and lack of freedom to date more frequently than any other costs category, males reported these costs significantly more often than did females (males, lack of freedom to socialize = 77%, lack of freedom to date = 83%; females, lack of freedom to socialize = 61%, lack of freedom to date = 56%). Males also reported monetary losses (18%) more often than did females (6%), whereas females mentioned loss of identity (29%), feeling worse about the self (29%), and increased

Table 1. *Perceived benefits of romantic relationships in Study 1*

	Percentage of Total Sample (N = 129)	Percentage of Females (N = 70)	Percentage of Males (N = 59)	Diff t
Companionship or Affiliation	60 ^a	66 ^a	54 ^b	1.51
Sexual Gratification	46 ^b	26 ^{de}	65 ^a	-4.75***
Feeling Loved or Loving Another	43 ^b	47 ^b	39 ^c	.47
Intimacy (Include mutual understanding, trust, and sharing)	42 ^b	47 ^b	36 ^{cd}	1.33
Expertise in Relationships	40 ^b	43 ^b	36 ^{cd}	.84
Self-Growth and Self-Understanding	37 ^b	40 ^{bc}	34 ^{cd}	.71
More Positive Self-Esteem (include higher self-respect and self-confidence)	32 ^b	49 ^b	14 ^f	4.48***
Exclusivity	32 ^b	31 ^{cd}	32 ^{cd}	-.27
Feeling Secure	28 ^c	27 ^{de}	29 ^{cde}	-.96
Social Support from Partner's Friends or Relatives	22 ^c	23 ^{de}	21 ^{def}	.11
Feeling of Happiness or Elation	16 ^d	14 ^e	18 ^{ef}	-.66
Learning About Other Sex	12 ^d	12 ^e	12 ^f	-.12

*** $p < .001$.

Note: Within a column, numbers that do not share a letter are significantly different from each other, based on contrast that adopted the Bonferroni correction (α level over $n-1$), thus setting α at $.05/11 = .0045$.

Table 2. *Perceived cost of romantic relationships in Study 1*

	Percentage of Total Sample (N = 129)	Percentage of Females (N = 70)	Percentage of Males (N = 59)	Test <i>t</i>
Social Sacrifices I.				
Lack of Freedom to Socialize	69 ^a	61 ⁸	77 ^a	-2.31*
Social Sacrifices II.				
Lack of Freedom to Date	68 ^a	56 ^b	83 ^a	-3.53***
Time and Effort Investment	27 ^b	27 ^{cd}	27 ^b	.003
Nonsocial Sacrifices (e.g., falling	24 ^b	24 ^{cde}	24 ^b	.07
Loss of Identity	22 ^b	29 ^c	14 ^b	2.13*
Feeling Worse About the Self	22 ^b	29 ^c	14 ^b	2.13*
Stress and Worry About Relationship	20 ^e	17 ^{def}	24 ^b	.56
Fights	16 ^c	14 ^{efg}	17 ^b	-.41
Increased Dependence on Partner	13 ^e	23 ^{cde}	3 ^b	3.49***
Monetary Losses	12 ^e	6 ^g	18 ⁶	-2.22*
Loss of Privacy	10 ^c	11 ^{fg}	9 ^b	.56
Loss of Innocence About Relationships and Love	9 ^d	10 ^{fg}	8 ^b	.30

* $p < .05$. ** $p < .001$.

Note: Within a column, numbers that do not share a letter are significantly different from each other, based on contrasts that adopted the Bonferroni correction, thus setting α at $.05111 = .0045$.

dependence on partner (23%) more often than did males (14%, 14%, and 3%, respectively). (The Gender main effect was not significant, $F[1,1271] = .002, p < .96$.)

Study 2

The methodology of Study 1 was guided by the assumption that the frequency with which subjects mention a particular category (i.e., benefit, cost) is a proxy for the importance of the category. However, several factors can cause frequency estimates to be nonrepresentative of importance. It is likely that some of the mentioned categories (e.g., interpersonal attraction) were unimportant, but were nevertheless listed frequently because they were highly accessible (Sedikides & Skowronski, 1991) in subjects' minds. To give a concrete example, it is possible that two subjects were commenting on some-one's attractiveness on the way to the experiment. Attractiveness would then quickly come to mind when these subjects participated in the study, even though these subjects might not usually consider attractiveness a highly important factor. In Study 2, we assessed more directly the relative importance

of the categories by obtaining comparative rankings.

Methods

One-hundred females and 100 males participated in Study 2. Subjects were given a two-page booklet containing all categories developed for each of the two tasks (i.e., benefits and costs) used in Study 1. Subjects rank-ordered the importance or seriousness of the categories within each task, with a rank of 1 defining the most important or serious category. The categories within each page were presented to subjects in a fixed random order. The order of the benefits and costs pages was randomized for each subject.

Results

Data analytic strategy

As in Study 1, a Task (i.e., benefits or costs) \times Gender mixed-subjects Analysis of Variance (ANOVA) was used to analyze rankings. The dependent variables in these two

analyses were the rankings of the 12 benefits and 12 costs, respectively, with main effects indicating that the benefits (or costs) were ranked differentially, and interactions with gender indicating that males and females differed in their rankings.

Benefits

A Benefits main effect, $F(11,2178) = 128.53$, $p < .0001$, indicated that companionship or affiliation was ranked as the most important benefit enjoyed followed by feeling loved or loving another, feeling of happiness or elation, and exclusivity (Table 3). These results are generally consistent with the corresponding results of Study 1.

One discrepancy between the results of the two studies involved the benefit of sexual gratification. It was not ranked in Study 2 as highly as one would expect based on the results of Study 1. However, consistent with the findings obtained in Study 1, males did rank sexual gratification as a significantly more important benefit than did females (Gender by Benefits interaction $F[11, 2178] = 5.44$, $p < .0001$). Males also ranked learning about the other sex as more important than did females, whereas females ranked as

more important than did males the benefits of intimacy, self-growth and understanding, and more positive self-esteem. (The Gender main effect did not reach significance, $F[1, 198] = .01$, $p < .92$.)

Costs

In contrast to Study 1, a significant Costs main effect, $F(11, 2178) = 10.15$, $p < .0001$, showed that stress and worry about relationships emerged as the most serious cost, followed by increased dependence on partner. Lack of freedom to socialize, nonsocial sacrifices, and fights were the next highest-ranking costs. Among the least serious costs reported were loss of privacy, loss of innocence about relationships and love, and monetary losses (see Table 4). These latter findings are consistent with Study 1.

Also in line with Study 1, a significant Gender by Costs interaction, $F(11, 2178) = 11.47$, $p < .0001$, revealed that females regarded as more serious than did males the costs of increased dependence on partner, loss of identity, feeling worse about the self, and loss of innocence about relationships and love. In contrast, males regarded monetary losses as a more serious cost than did fe-

Table 3. Rank-ordered benefits of romantic relationships in Study 2

	Total Sample Rank Order (N = 200)	Female Rank Order (N = 100)	Male Rank Order (N = 100)	t test
Companionship or Affiliation	2.95 ^a	2.79 ^a	3.11 ^{ah}	-.94
Feeling Loved or Loving Another	3.17 ^a	3.30 ^{ab}	3.03 ^a	.82
Feeling of Happiness or Elation	4.08 ^b	4.13 ^{bc}	4.02 ^{bc}	.29
Exclusivity	4.90 ^b	5.04 ^{cd}	4.75 ^c	.74
Intimacy	6.47 ^c	5.82 ^{de}	7.11 ^o	-3.10 ^h
Self-Growth and Self-Understanding	6.57 ^c	6.04 ^{de}	7.10 ^e	-2.66
More Positive Self-Esteem	7.12 ^{cd}	6.71 ^e	7.52 ^{ef}	-2.07
Feeling Secure	7.13 ^{cde}	6.77 ^{ef}	7.48 ^e	-1.74
Sexual Gratification	7.80 ^{de}	8.71 ^{ef}	6.88 ^d	4.37 ^h
Expertise in Relationships	7.97 ^e	8.23 ^{ef}	7.71 ^{fg}	1.27
Learning About Other Sex	8.67 ^f	9.25 ^f	8.08 ^g	3.01 ^h
Social Support from Partner's Friends or Relatives	10.12 ^g	10.18 ^g	10.06 ^h	.33

• $p < .05$. ** $p < .01$. *** $p < .001$.

Note: Within a column, numbers that do not share a letter are significantly different from each other, based on contrasts that adopted the Bonferroni correction ($\alpha = .0045$).

Table 4. Rank-ordered costs of romantic relationships in Study 2

	Total Sample Rank Order (N = 200)	Female Rank Order (N = 100)	Male Rank Order (N = 100)	t test
Stress and Worry About Relationship	4.208	4.43 ^a	3.96 ^a	1.10
Increased Dependence on Partner	5.38 ^{bc}	4.69 ^{ab}	6.07 ^d	-3.16 ^{**}
Social Sacrifices I.				
Lack of Freedom to Socialize	5.55 ^{ed}	5.76 ^{bc}	5.33 ^{ab}	1.01
Nonsocial Sacrifices	5.72 ^{cde}	5.39 ^{bc}	5.65 ^{bc}	.33
Fights	5.78 ^{cdef}	5.83 ^{bc}	5.73 ^d	.21
Feeling Worse About the Self	6.37 ^{def}	5.75 ^{bc}	6.99 ^{ef}	-2.38 [*]
Loss of Identity	6.41 ^{def}	5.10 ^{bc}	7.72 ^f	-5.97 ^{***}
Social Sacrifices II.				
Lack of Freedom to Date	6.44 ^{ef}	6.73 ^c	6.14 ^{db}	1.18
Time and Effort Investment	6.75 ^g	7.79 ^e	5.71 ^e	4.56 ^{**}
Loss of Privacy	7.45 ^{gh}	7.36 ^{de}	7.53 ^f	-.41
Loss of Innocence About Relationships				
and Love	8.31 ^E	7.14 ^d	9.47 ^f	-5.30 ^{***}
Monetary Losses	8.75 ^I	10.01 ^f	7.48 ^f	5.68 ^{**}

* $p < .05$. ** $p < .01$. *** $p < .001$.

Note: Within a column, numbers that do not share a letter are significantly different from each other, based on contrasts that adopted the Bonferroni correction ($\alpha = .0045$).

males. (The Gender main effect was not significant, $F[1,198] = 1.98, p < .16$.)

Study 3

The results of Study 2 generally confirm and extend the results of Study 1. However, the results of Study 2 should still be interpreted with some caution. For instance, it is likely that forcing subjects to comparatively rank the categories inflated artificially the differences among categories. Thus, a given category may have been consistently ranked above another category, although the two categories may in actuality be very close in importance. To control for this potential problem and to provide additional converging validation of the previously obtained results, subjects in Study 3 were asked to rate each category on a standard 7-point scale.

Methods

One-hundred females and 100 males participated in Study 3. Subjects were presented with the benefits and costs generated in Study 1, and were asked to rate the categories

on importance or seriousness. Rating scales ranged from 1 (Extremely Unimportant or Nonserious) to 7 (Extremely Important or Serious). The categories in each of the two lists were presented to subjects in a fixed random order. The order of the benefits and costs pages was randomized for each subject.

Results

Data analytic strategy

A Task (i.e., benefits or costs) \times Gender mixed-subjects Analysis of Variance (ANOVA) was used to analyze ratings. The dependent variables in these two analyses were the ratings of the 12 benefits and 12 costs, respectively, with main effects indicating that the benefits (or costs) were rated differentially, and interactions with gender indicating that males and females differed in their ratings.

Benefits

The relative importance of benefits was highly consistent in Studies 2 and 3 (Table 5).

Table 5. Rated benefits of romantic relationships in Study 3

	Total Sample Importance Ratings (N = 200)	Female Importance Rating (N = 100)	Male Importance Rating (N = 100)	Diff t
Companionship or Affiliation	6.46 ^a	6.59 ^a	6.32 ^a	2.21 [†]
Feeling of Happiness or Elation	6.24 ^b	6.39 ^{ab}	6.09 ^{ab}	2.36
Exclusivity	6.13 ^b	6.32 ^b	5.93 ^{bc}	3.01 ^{††}
Feeling Loved or Loving Another	6.13 ^b	6.30 ¹	5.95 ^b	2.52 [†]
Intimacy	6.05 ^b	6.39 ^{ab}	5.71 ^{cd}	4.54 ^{†††}
Self-Growth and Self-Understanding	5.51 ^e	5.84 ^e	5.17 ^f	3.99 [†]
Expertise in Relationships	5.24 ^{cd}	5.27 ^{de}	5.20 ^{ef}	.37
More Positive Self-Esteem	5.19 ^d	5.42 ^d	4.96 ^f	2.51 ^{†*}
Sexual Gratification	5.13 ^{de}	4.90 ^{ef}	5.364 ^e	-2.31
Feeling Secure	5.114 ^e	5.27 ^{de}	4.95 ^f	1.82
Learning About Other Sex	4.92 ^e	4.98 ^{ef}	4.86 ^{fg}	.65
Social Support from Partner's Friends or Relatives		4.53 ^f	4.41 ^g	.58

* $p < .05$. ** $p < .01$. *** $p < .001$.

Note: Within a column, numbers that do not share a letter are significantly different from each other, based on contrasts that adopted the Bonferroni correction ($\alpha = .0045$).

Companionship or affiliation, feelings of happiness or elation, exclusivity, and feeling loved or loving another were rated as the most important benefits, whereas sexual gratification, feeling secure, learning about the other sex, and social support from partner's friends and relatives were rated as the least important benefits. (Benefits main effect $F[11,2178] = 79.67, p < .0001$.)

As in Study 2, a significant interaction of Benefits and Gender, $F(11,2178) = 4.56, p < .0001$, demonstrated that females in Study 3 regarded as more important than did males the benefits of intimacy, self-growth and self-understanding, and more positive self-esteem, whereas males considered the benefit of sexual gratification as more important than did females. Additional gender differences included females' higher ratings than males' ratings for companionship or affiliation, feelings of happiness or elation, and exclusivity. (The Gender main effect was significant, $F[1,198] = 7.81, p < .006$.)

Costs

As Table 6 shows, the most serious costs were stress and worry about relationship,

nonsocial sacrifices, lack of freedom to socialize, and fights, whereas the least serious costs included monetary losses, loss of privacy, loss of identity, and loss of innocence about relationships and love. (Costs main effect $F[11, 2178] = 22.43, p < .0001$.) The results are generally in agreement with Study 2.

Females considered more important than males the costs of loss of identity and loss of innocence, whereas males considered as more important than females the costs of time and effort investment and monetary losses ($F[11, 2178] = 5.85, p < .0001$). This pattern of gender differences replicates Study 2. (The Gender main effect was not significant, $F[1,198] = .72, p < .40$.)

Discussion

Although much research attention has been directed to the effects of social exchange variables on relationship development, satisfaction, and dissolution, little is known about the personal meanings and beliefs that individuals have about these exchange variables, or about the relative importance that individuals ascribe to these variables.

	Total Sample Importance Ratings (N = 200)	Female Importance Rating (N =100)	Male Importance Rating (N =100)	Diff ^t
Stress and Worry About	4.98 ^a	4.99	5.00 ⁱ	-.22
Nonsocial Sacrifices	4.69 ["]	4.84 ["]	4.54 ^{"h}	1.12
Social Sacrifices I.	4.43 ["]	4.46 ^c	4.40 ["]	.94
Lack of Freedom to Socialize				
Fights	4.38 ["]	4.48 ["]	4.28 ["]	.82
Time and Effort. Investment	4.30 ^{"<}	4.02 ["]	4.5R ^{ab}	-2.12 [']
Increased Dependence on Partner	4.14 ^{"f}	4.39 ^b	3.89 ["]	1.83
Social Sacrifices II.	4.00 ^{act}	3.84 ^{td}	4.16 ^{bc}	-1.17
Lack of Freedom to Date				
Feeling Worse About the Self	3.98 ^f	4.11 ["]	3.84 ^{o'}	.34
Monetary Losses	3.639	3.18 [']	4.07 ["]	
Loss of Privacy	3.579	3.67 ^o	3.46 ^{dt}	.87
Loss of Identity	3.499	3.94 ["]	3.03 ["]	3.33
Loss of Innocence About Relationships and Love	3.20 ^f	3.66 ^{ot}	2.73 ^l	

* p .05. *** p .001.

Note.-Within a column, numbers that do not share a letter are significantly different from each other, based on contrasts that adopted the Bonferroni correction ($\alpha = .0045$)

Moreover, little is known about gender differences in subjective construals of relationship benefits and costs. The present investigation represents an attempt to fill these gaps in the literature.

Summary of Findings and Implications for Existing Literature

The results of the investigation demonstrated that the major benefits of romantic relationships were companionship or affiliation, feeling of happiness or elation, exclusivity, feeling loved or loving another, intimacy, self-growth and self-understanding, and more positive self-esteem. Some of these findings (i.e., intimacy, loving another, more positive self-esteem) support past suggestions and assumptions (Duck, 1991; McAdams, 1984, 1988; Rook & Pietromonaco, 1987; Weiss 1969, 1974). Other findings (companionship or affiliation, feeling of happiness or elation, exclusivity, feeling loved, self-growth and self-understanding) complement past speculation. At the same time, a few hypothesized relationship bene-

effective behavioral regulation, satisfaction of the need for power) failed to receive empirical support.

The most serious costs of romantic involvement were stress and worry about the relationship, social and nonsocial sacrifices, increased dependence on the partner, fights, time and effort investment, and feeling worse about the self. A portion of these findings (e.g., fights, increased dependence on the partner) confirmed past speculation (Rook & Pietromonaco, 1987; Hatfield, 1984). Other findings (costs of stress and worry about relationship, social and nonsocial sacrifices, time and effort investment) served to articulate further the generally consistent suggestions of previous scholars. However, a final portion of the findings did not correspond to previously proposed costs of romantic involvement, such as ineffective or excessive help, fear of exposure, abandonment, angry attacks, and loss of control. The present study's inability to find specific costs may be a result of the experimental method used; Feeney and Noller (1991) did

its (i.e., material support, suggestions for

find evidence for such costs in a study where couples were asked to talk about their relationships in detail for a 5-minute time period. However, Feeney and Noller's (1991) results were obtained for anxious-ambivalents specifically, who likely represent only a small proportion of the total sample in the present research.

The idea that relationships bear costs is not, of course, new (see the literature on conflict, violence, and jealousy; Brehm, 1992). Somewhat unexpected, though, were the discrepant reports concerning self-perception. For example, subjects mentioned that romantic involvement led to self-growth and understanding, but also to loss of identity. Subjects also mentioned that involvement led to feeling better about the self, yet simultaneously mentioned that involvement led to feeling worse about the self. Although a relatively small percentage (18%) of subjects in Study 1 reported discrepant benefits and costs, these findings are nevertheless consistent with research on relationship dialectics (Baxter, 1990) in highlighting the contradictory effects of romantic involvement upon self-perception.

Gender Differences

Several predictions regarding gender differences were derived from past literature. In comparison to males, females were expected to (1) regard need for commitment, need for intimacy, need to be cared for or loved, and need for caring or loving as more important, and (2) report experiencing more intense feelings, both positive and negative. In comparison to females, males were expected to regard (1) interpersonal attraction, sexual gratification, and exclusivity as more important, and (2) monetary losses as a more serious cost.

Results were generally consistent with predictions. Females regarded the benefits of intimacy, self-growth and self-understanding, and increased self-esteem as more important. Additionally, females considered loss of identity and loss of innocence about relationships and love as more serious costs (the former, loss of identity, is consistent with past research and theorizing; e.g., Bernard, 1972). In contrast, males considered the need for sexual gratification as a more important benefit of romantic engagement, and they considered monetary losses as a more serious cost.

Although specific gender differences were evident in these data, three qualifying points need to be made. First, there were far more similarities in men's and women's responses than there were

differences; the few differences should not be focused upon to the exclusion of the many similarities. Second, caution should be exercised in generalizing the gender differences we obtained given that we used a demographically limited sample. Finally, the present investigation does not address the issue of causality; based on the reported results it is impossible to infer a causal relation between gender and differences in benefits and/or costs.

Directions for future research

The present investigation identified gender differences in the perceived importance of relationship benefits and costs. However, three additional classes of factors may also influence these perceptions: individual factors, relational factors, and contextual factors.

Individual factors influencing perceptions of benefits and costs. The reported studies were concerned with the impact of relationship involvement in early adulthood, and therefore used a college population. Nevertheless, it is reasonable to expect that the effects of relationships are experienced differently by same-age, noncollege populations, or by populations of different demographic, socioeconomic, and cultural characteristics.

Relational factors. People in different types of relationships may vary in the importance they assign to relationship benefits and costs. Exchange-relationship partners may evaluate the *same* resources differently from communal-relationship partners (Clark & Mills, 1979). Partners in love may value different benefits (e.g., caring, warm feelings, trust; Fehr, 1988) than do partners who have fallen out of love. Sexual gratification and intimacy may be less important in devitalized, passive-congenial, or conflict-habituated relationships (Cuber & Harroff, 1965). Furthermore, gender may interact with the above relational factors; for example, gender differences may be less apparent in communal or love relationships.

Contextual factors. Current relationship involvement influences the cognitive accessibility or

reporting of particular benefits or costs. For example, it has been found that perception of alternative partners is an important predictor of relationship stability or dissolution (Hill, Rubin, & Peplau, 1976; Simpson, 1987). Furthermore, individuals currently in a relationship engage in perceptual derogation of alternative partners (Johnson & Rusbult, 1989; Simpson, Gangestad, & Lerma, 1992). It follows that, in comparison with romantically uninvolved persons, individuals who are currently involved may not rate foregoing alternative partners as an important cost.

The evaluation of benefits and costs may also be influenced by the type of comparison referent. The present investigation was restricted to romantic relationships. However, other relationships (e.g., collegial, familial, friendships) may entail quite different benefits and costs.

Extensions through longitudinal or experimental designs

The present investigation focused on retrospective accounts regarding romantic involvement. As Aron, Dutton, Aron, and Iverson (1989) pointed out, subjects' retrospective accounts are of interest, because "they probably represent to a significant degree the psychological reality at the time of the event" (p. 254). At the same time, though, retrospective accounts involve a considerable degree of construction. Thus, to provide some degree of control for the amount of construction in subjects' verbal

reports, future research should adopt longitudinal designs.

At least two additional reasons exist for advocating the use of longitudinal designs. First, the importance of perceived benefits and costs may change as a function of relationship development. Some suggestive evidence is provided by Sternberg and Wright's (Sternberg, 1987) cross-sectional findings that attributes such as physical attractiveness, ability to make love, ability to empathize, knowledge of what each other is like, and expression of affection toward each other increase in importance from short-duration to medium-duration relationships but decrease from medium-duration to long-duration relationships. Longitudinal designs can provide more definitive evidence for variations in the importance of perceived benefits and costs as a function of relationship development.

An additional reason for advocating the use of

longitudinal designs is the need to examine in more depth the undoubtedly complex consequences of romantic involvement on self-perception. As mentioned previously, the obtained results suggest contradictory effects of romantic involvement on self-perception. How such effects are produced and resolved is a priority issue for future research, an issue that can be nicely tackled through longitudinal research.

An experimental approach could also extend the obtained findings. As mentioned earlier in this article, part of the rationale of the present investigation was to shed some insight into the link between relational benefits and costs on the one hand and motivation to enter and/or maintain a relationship on the other. This link can be further explored through laboratory experimentation. Romantically uninvolved subjects could be brought into the laboratory, presented with different patterns of benefits and costs, and asked how these patterns might affect their decision to enter a relationship; alternatively, romantically involved subjects could be presented with varying patterns of benefits and costs and asked to report the likelihood of maintaining their relationship. Finally, both longitudinal and experimental approaches can be enriched through the use of interviewing techniques. In the present investigation, subjects listed the benefits and costs of romantic involvement in a laboratory setting. Although this procedure certainly afforded increased levels of control over extraneous variables, it may also have led subjects to produce less well thought-out or "top-of-the-head" (Taylor & Fiske, 1978) responses. Our procedure may have failed to uncover less common costs or benefits—those that would result from prolonged introspection on the part of subjects. Thus, future research will do well to consider using interviewing techniques to elicit more detailed and in-depth reports from subjects.

Concluding Note

This investigation uncovered several benefits and costs that accompany romantic relationships, thus contributing toward a better understanding of the subjectively construed effects of romantic relationships on the individual. Furthermore, the research addressed a shortcoming of exchange theory as applied to romantic relationships by dealing substantively with the dimensions of benefits and costs. We hope that the empirical

foundation laid by this investigation will inform future theorizing regarding the meaning of

romantic relationships as recounted by the individuals involved.

References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 266-300). New York: Academic Press.
- Aron, A., Dutton, D. G., Aron, E. N., & Iverson, A. (1989). Experiences of falling in love. *Journal of Social and Personal Relationships*, 6, 243-257.
- Aronson, E. (1969). Some antecedents of interpersonal attraction. In W. J. Arnold & D. Levine (Eds.), *Nebraska symposium on motivation* (Vol. 17). Lincoln: University of Nebraska Press.
- Baxter, L. A. (1990). Dialectical contradictions in relationship development. *Journal of Social and Personal Relationships*, 7, 69-88.
- Berg, J. H., & McQuinn, R. D. (1986). Attraction and exchange in continuing and noncontinuing dating relationships. *Journal of Personality and Social Psychology*, 50, 942-952.
- Berg, J. H., Piner, K. E., & Frank, S. M. (1993). Resource theory and close relationships. In U. G. Foa, J. Converse, Jr., K. Y. Tornblom, & E. B. Foa (Eds.), *Resource theory: Explorations and applications* (pp. 169-195). San Diego: Academic Press.
- Bernard, J. (1972). *The future of marriage*. New York: World.
- Blau, P. M. (1967). *Exchange and power in social life*. New York: Wiley.
- Brehm, S. S. (1992). *Intimate relationships* (2nd ed.). New York: McGraw-Hill.
- Buss, D. M., & Barnes, M. (1986). Preferences in human mate selection. *Journal of Personality and Social Psychology*, 50, 559-570.
- Carroll, J. L., Volk, K. D., & Hyde, J. S. (1985). Differences between males and females in motives for engaging in sexual intercourse. *Archives of Sexual Behavior*, 14, 131-139.
- Clark, M. S. (1981). Noncomparability of benefits given and received: A cue to the existence of friendship. *Social Psychology Quarterly*, 41, 375-381.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37, 12-24.
- Cochran, W. C. (1947). Some consequences when the assumption for the analysis of variance is not satisfied. *Biometrika*, 3, 22-38.
- Cuber, J. F., & Harroff, P. B. (1965). *The significant Americans*. New York: Appleton-Century-Crofts.
- Deaux, K. (1993). Commentary: Sorry, wrong number—A reply to Gentile's call. *Psychological Science*, 4, 125-126.
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin*, 112, 106-124.
- Dion, K. K., & Dion, K. L. (1985). Personality, sex, and the phenomenology of romantic love. In P. Shaver (Ed.), *Self, situations, and social behavior* (pp. 209-239). Beverly Hills, CA: Sage.
- Duck, S. (1991). *Understanding relationships*. New York: Guilford.
- Erikson, E. (1963). *Childhood and society*. New York: Norton.
- Feeney, J. A., & Noller, P. (1991). Attachment style and verbal descriptions of romantic partners. *Journal of Social and Personal Relationships*, 8, 187-215.
- Fehr, B. (1988). Prototype analysis of the concepts of love and commitment. *Journal of Personality and Social Psychology*, 55, 557-579.
- Fengler, A. P. (1974). Romantic love in courtship: Divergent paths of male and female students. *Journal of Comparative Family Studies*, 5, 134-139.
- Fiske, A. P. (1991). *Structures of social life: The four elementary forms of social relationship*. New York: Free Press.
- Fiske, A. P., Haslam, N., & Fiske, S. T. (1991). Confusing one person with another: What errors reveal about the elementary forms of social relations. *Journal of Personality and Social Psychology*, 60, 656-674.
- Foa, U. G., Converse, J., Jr., Tornblom, K. Y., & Foa, E. B. (Eds.). (1993). *Resource theory: Explorations and applications*. San Diego: Academic Press.
- Foa, U. G., & Foa, E. B. (1974). *Societal structures of the mind*. Springfield, IL: Charles C. Thomas.
- Foa, U. G., & Foa, E. B. (1980). Resource theory: Interpersonal behavior as exchange. In K. J. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 77-94). New York: Plenum Press.
- Garner, W. R., Hake, H. W., & Eriksen, C. W. (1956). Operationism and the concept of perception. *Psychological Review* 63, 149-159.
- Gentile, D. A. (1993). Just what are sex and gender, anyway? A call for a new terminological standard. *Psychological Science*, 4, 120-122.
- Hatfield, E. (1983). What do women and men want from love and sex? In E. R. Allgeier & N. B. McCormick (Eds.), *Changing boundaries: Sex roles and sexual behavior* (pp. 106-134). Palo Alto, CA: May-field Publishing.
- Hatfield, E. (1984). The dangers of intimacy. In V. J. Derlega (Ed.), *Communication, intimacy, and close relationships* (pp. 207-220). Orlando, FL: Academic Press.
- Hendel, D. D. (1978). Mate selection values of high school and college students. *Counseling and Values*, 22, 127-133.
- Hendrick, S. S., & Hendrick, C. (1987). Love and sex attitudes: A close relationships. In W. H. Jones & D. Pearlman (Eds.), *Advances in personal relationships* (Vol. 1, pp. 141-169). Greenwich, CT: JAI Press.
- Hill, C. T., Rubin, Z., & Peplau, L. A. (1976). Breakups before marriage: The end of 103 affairs. *Journal of Social Issues*, 32, 147-168.
- Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York: Harcourt, Brace & World.
- Howard, J. A., Blumstein, P., & Schwartz, P. (1987). Social or evolutionary theories? Some observations on preferences in human mate selection. *Journal of Personality and Social Psychology*, 53, 194-200.
- Hsu, T. C., & Feldt, L. S. (1969). The effect of imitations on the number of criterion score values on the significance level of the F-test. *American Educational Research Journal*, 6, 515-527.
- Jacklin, C. N. (1981). Methodological issues in the study of sex-related differences. *Developmental Review*, 1, 266-273.
- Johnson, D. J., & Rusbult, C. E. (1989). Resisting temptation: Devaluation of alternative partners as a means of maintaining commitment in close relationships. *Journal of*

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- Personality and Social Psychology*, 57, 967–980.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York: Wiley.
- Keppel, G. (1991). *Design and analysis: A researcher's handbook*. Englewood Cliffs, NJ: Prentice-Hall.
- Laner, M. R. (1977). Permanent partner priorities: Gay and straight. *Journal of Homosexuality*, 3, 12–39.
- Levinger, G. (1964). Task and social behavior in marriage. *Sociometry*, 27, 433–448.
- Levinson, D. J., Darrow, C. B., Klein, E. B., Levinson, M. H., & McKee, B. (1978). *The seasons of a man's life*. New York: Knopf.
- Long, B. H. (1989). Heterosexual involvement of un-married undergraduate females in relation to self-evaluations. *Journal of Youth and Adolescence*, 18, 489–500.
- Lott, A., & Lott, B. (1974). The role of reward in the formation of positive interpersonal attitudes. In T. L. Huston (Ed.), *Foundations of interpersonal attraction*. New York: Academic Press.
- Lunney, G. H. (1970). Using analysis of variance with a dichotomous dependent variable: An empirical study. *Journal of Educational Measurement*, 7, 263–269.
- MacCrimmon, K. R., & Messick, D. M. (1976). A framework for social motives. *Behavioral Science*, 21, 86–100.
- McAdams, D. P. (1984). Human motives and personal relationships. In V. J. Derlega (Ed.), *Communication, intimacy, and close relationships* (pp. 41–70). Orlando, FL: Academic Press.
- McAdams, D. P. (1988). Personal needs and personal relationships. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 7–22). Chichester: Wiley.
- McCabe, M. P. (1987). Desired and experienced levels of premarital affection and sexual intercourse during dating. *The Journal of Sex Research*, 23, 23–33.
- Mills, J., & Clark, M. S. (1982). Exchange and communal relationships. In L. Wheeler (Ed.), *Review of Personality and Social Psychology* (Vol. 3, pp. 121–144). Beverly Hills, CA: Sage.
- Nevid, J. S. (1984). Sex differences in factors of romantic attraction. *Sex Roles*, 11, 401–411.
- Parsons, T., & Shils, E. A. (Eds.). (1951). *Toward a general theory of action*. Cambridge, MA: Harvard University Press.
- Pearson, E. S. (1931). The analysis of variance in cases of non-normal variation. *Biometrika*, 23, 114–123.
- Peplau, L. A., & Gordon, S. L. (1985). Women and men in love: Sex differences in close heterosexual relationships. In V. E. O'Leary, R. K. Unger, & B. S. Wallston (Eds.), *Women, sex, and social psychology* (pp. 257–291). Hillsdale, NJ: Erlbaum.
- Pryor, J. B., & Ostrom, T. M. (1981). The cognitive organization of social information: A converging operations approach. *Journal of Personality and Social Psychology*, 41, 628–641.
- Rettig, K. D., Danes, S. M., & Bauer, J. W. (1993). Gender differences in perceived family life quality among economically stressed farm families. In U. G. Foa, J. Converse, Jr., K. Y. Tornblom, & E. B. Foa (Eds.), *Resource theory: Explorations and applications* (pp. 123–155). San Diego: Academic Press.
- Rook, K. S., & Pietromonaco, P. (1987). Close relationships: Ties that heal or ties that bind? In W. H. Jones & D. Pearlman (Eds.), *Advances in personal relationships* (Vol. 1, pp. 1–35). Greenwich, CT: JAI Press.
- Rubin, Z., Peplau, L. A., & Hill, C. T. (1981). Loving and leaving: Sex differences in romantic attachment. *Sex Roles*, 7, 821–835.
- Sack, A. R., Keller, J. F., & Hinkle, D. E. (1981). The sexual double standard: How prevalent today? *College Student Journal*, 15, 47–52.
- Safilios-Rothschild, C. (1976). A macro- and micro-examination of family power and love: An exchange model. *Journal of Marriage and the Family*, 38, 355–362.
- Schultz, U., & May, T. (1989). The recording of social orientations with ranking and pair comparison procedures. *European Journal of Social Psychology*, 19, 41–59.
- Sedikides, C., & Skowronski, J. J. (1991). The law of cognitive structure activation. *Psychological Inquiry*, 2, 169–184.
- Simpson, J. A. (1987). The dissolution of romantic relationships: Factors involved in relationship stability and emotional distress. *Journal of Personality and Social Psychology*, 52, 1192–1201.
- Simpson, J. A., & Gangestad, S. W. (1992). Sociosexuality and romantic partner choice. *Journal of Personality*, 60, 31–51.
- Simpson, J. A., Gangestad, S. W., & Lerma, M. (1992). Perception of physical attractiveness: Mechanisms involved in the maintenance of romantic relationships. *Journal of Personality and Social Psychology*, 59, 1192–1201.
- Sprecher, S. (1985). Sex differences in bases of power in dating. *Sex Roles*, 12, 449–462.
- Sprecher, S., & Metts, S. (1989). Development of the "romantic beliefs scale" and examination of the effects of sex and sex-role orientation. *Journal of Social and Personal Relationships*, 6, 387–411.
- Sprecher, S., & Sedikides, C. (1993). Gender differences in perceptions of emotionality: The case of close heterosexual relationships. *Sex Roles*, 28, 511–530.
- Srull, T. K. (1984). Methodological techniques for the study of person memory and social cognition. In R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (Vol. 2, pp. 2–72). Hillsdale, NJ: Erlbaum.
- Sternberg, R. J. (1987). Explorations of love. In W. H. Jones (Ed.), *Advances in personal relationships* (Vol. 1, pp. 171–196). Greenwich, CT: JAI Press.
- Taylor, S. E., & Fiske, S. T. (1978). Salience, attention, and attribution: Top of the head phenomena. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 11, pp. 249–288). New York: Academic Press.
- Unger, R. K. (1979). Toward a redefinition of sex and gender. *American Psychologist*, 34, 1085–1094.
- Unger, R. K., & Crawford, M. (1992). *Women and gender: A feminist psychology*. Philadelphia: Temple University Press.
- Unger, R. K., & Crawford, M. (1993). Commentary: Sex and gender—The troubled relationship between terms and concepts. *Psychological Science*, 4, 122–124.
- Van Yperen, N. W., & Buunk, B. P. (1990). A longitudinal study of equity and satisfaction in intimate relationships. *European Journal of Social Psychology*, 20, 287–309.
- Weiss, R. S. (1969). The fund of sociability. *Transaction*, 7, 36–43.
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others* (pp. 17–26). Englewood Cliffs, NJ: Prentice-Hall.
- Wood, W., Rhodes, N., & Whelan, M. (1989). Sex differences in positive well-being: A consideration of emotional style and marital status. *Psychological Bulletin*, 106, 249–264.