

# A Theory and Method of Love

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This research was part of a larger research program on love and sex attitudes. Earlier work on love was reported in Hendrick, Hendrick, Foote, and Slapion-Foote (1984). The work on love extends Lee's (1973/1976) theory of six basic love styles: Eros (passionate love), Ludus (game-playing love), Storge (friendship love), Pragma (logical, "shopping list" love), Mania (possessive, dependent love), and Agape (all-giving, selfless love). Theory development has proceeded concurrently with the development of measurement scales. Study I ( $N = 807$ ) used a 42-item rating questionnaire, with 7 items measuring each of the love styles. Six love style scales emerged clearly from factor analysis. Internal reliability was shown for each scale, and the scales had low intercorrelations with each other. Significant relationships were found between love attitudes and several background variables, including gender, ethnicity, previous love experiences, current love status, and self-esteem. Confirmatory Study II ( $N = 567$ ) replicated factor structure, factor loadings, and reliability analyses of the first study. In addition, the significant relationships between love attitudes and gender, previous love experiences, current love status, and self-esteem were also consistent with the results of Study I. The love scale shows considerable promise as an instrument for future research on love.

During the past decade, love has become respectable as an area for study by psychologists (e.g., Rubin, 1984). Several theories of love have been proposed (e.g., readings by Cook & Wilson, 1979; Kelley, 1983). Early theories that used global concepts of love are being replaced by theories that use multidimensional constructs that promise greater yields in knowledge.

## Theories of Love

Blau (1964) proposed an exchange theory of love that characterized the development of love as requiring a nicely balanced degree of mutuality and the consistent exchange of rewards between partners. More recently, Clark and Mills (1979) attempted to differentiate "exchange" from "communal" (e.g., altruistic) relationships by showing that a "tit for tat" approach may be accepted in an exchange relationship, but such an approach may actually damage a communal relationship.

Berscheid and Walster (1974) proposed an approach to love which described romantic, passionate love as physiological arousal accompanied by appropriate cognitive cues such that "passionate love" is the appropriate label for the arousal. From this essentially labeling approach, Walster and Walster (1978) proposed two general kinds of love: passionate love and companionate love, with the former nearly always evolving to the latter in an enduring close relationship.

Moving counter to the increasing emphasis on love as multidimensional, Sternberg and Grajek (1984) proposed that there is a "general factor" of love which is quite consistent across romantic, familial, and friendship relationships. However, the authors note that although the various love experiences may be similar, the "concomitants" of the experiences may be quite dif-

ferent. In a recent scholarly attempt to develop a conceptual and methodological framework within which to examine love, Kelley (1983) introduced a model for what he called "pragmatic love" (p. 283) while still recognizing passionate love (e.g., Berscheid & Walster, 1978) and altruistic love (e.g., Clark & Mills, 1979). Pragmatic love emphasizes trust and tolerance and develops with greater deliberation and self-control than do other types of love. As Kelley concluded, "love is typically a blend of the different forms described by the preceding models" (p. 186). Unfortunately, a comprehensive model that relates and integrates these different forms of love has not been available.

## Scale Development

The primary thrust of psychological work on love has been toward theory building, with a limited secondary thrust toward scale construction. Considerable work in the area has been done by Rubin (1970, 1973, 1974), who was one of the first to study the similarities and differences between loving and liking. Rubin viewed the two as conceptually distinct though linked phenomena, and he developed two scales to measure the two constructs. Although the scales have been widely used, and the distinction between the two concepts was clear, the correlation between the two scales was higher than desirable for measures of two independent constructs. However, some positive evidence for the validity of the distinction has been obtained (Dermer & Pyszczynski, 1978; Hill, Rubin, & Peplau, 1976). In contrast, in a conceptual analysis, Kelley (1983) identified four components of Rubin's love scale (needing, caring, trust, tolerance) and suggested that the liking scale might better have been named as a measure of respect. Research by Steck, Levitan, McLane, and Kelley (1982) attempted to manipulate these presumed components of the love scale and found quite different responses to different stimulus profiles, even though the total love score attributed to stimulus strangers was constant across stimulus profiles. For example, a "caring" profile connoted a greater degree of love than

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a "needing" profile. Thus it appears that the initial simplicity of Rubin's scales masks a more complex multidimensional reality.

An attempt to examine the relationship between romantic love and locus of control (Dion & Dion, 1973) produced interesting results with explicit application to scaling. In the course of their study, the authors asked 255 subjects to rate their subjective experience of romantic love on 23 bipolar adjective items. The results of a factor analysis of the items suggested at least five different approaches (or styles) of experiencing love. These were labeled volatile, circumspect, rational, passionate, and impetuous.

There have been several other approaches to the scaling of love (e.g., Hinkle & Sporakowski, 1975; Swenson, 1972), though scale development and theory development were not tightly linked. An exception was Munro and Adams (1978), who differentiated romantic from conjugal love and related both to developmental changes in individuals' role structures.

### Colors of Love

One of the more interesting theories of love was proposed by Lee (1973/1976) who forged a classification of several different approaches to love. After an extensive interview procedure and complex data reduction techniques, Lee proposed a typology of love styles that formed a closed circle. Lee identified three primary types of love styles: Eros (romantic, passionate love), Ludus (game-playing love), Storge (friendship love), and three main secondary styles: Mania (possessive, dependent love), Pragma (logical, "shopping list" love), and Agape (all-giving, selfless love). These secondary styles were conceived as compounds of pairs of primary styles. Analogous to chemical compounds, the secondary styles are qualitative transformations of the "base primary elements." Thus, Mania is a compound of Eros and Ludus, but Mania is qualitatively very different from either primary. In the same fashion, Pragma is a compound of Storge and Ludus, but has very different properties. The same holds true for Agape, a compound of Eros and Storge. One implication of the analogy to chemical compounds is that although the six love styles are logically interrelated, each style has qualitative properties independent of all of the other styles. Empirically, measures of these six love styles should be orthogonal to each other. In sum, the love styles are all equally valid ways of loving. There is no one type of love, but rather many different types.

Lee's typology is exceedingly rich theoretically, both because of its multidimensionality and grounding in research, and because it encompasses less extensive love theories that have been proposed. For instance, exchange theory is probably a basis for Lee's (1973/1976) Pragma (logical), whereas Clark and Mills' (1979) communal love is exemplified by Agape (selfless). Berscheid and Walster (1978) would recognize Eros as their passionate love, whereas companionate love is probably best represented by Storge (friendship). Kelley's (1983) pragmatic love would seem to equal Pragma. Even Dion and Dion's (1973) factors appear very similar to Lee's (1973) constructs: Volatile = Mania, Circumspect = Storge, Rational = Pragma, and Passionate = Eros. Thus, Lee offers multidimensionality within a coherent theory.

Lee's research inspired the development of a 50-item true-false scale to measure the six love styles (Hatkoﬀ & Lasswell, 1979; Lasswell & Lasswell, 1976). Each subject received a score

on each of the six subscales by counting the number of *true* responses for the items in a given subscale. Thus, each subject could be profiled on all six subscales. It was reported that a Gutman-Lingoes Smallest Space analysis produced the six love types as conceptually distinct (although none of the details of the data analyses were reported). Gender differences in love styles were also reported. Rosenman (1978) correlated the Lasswells' love scale with Rubin's liking and loving scales. Rubin's love scale correlated positively with the subscales representing Storge, Agape, and Mania, but not with Pragma, Ludus, and Eros. These results fit Kelley's (1983) analysis of Rubin's scale, with Kelley's needing component equaling Mania, whereas caring, trust, and tolerance equaled Agape and Storge. What was missing from Rubin's scale was the passion of Eros.

Although Lee's typology offers an intriguing combination of conceptual richness and clarity, no sustained work had been done with either Lee's theory or the Lasswells' scale until the current research program was initiated.

A previous study (Hendrick, Hendrick, Foote, & Slapion-Foote, 1984) built on the Lasswells' work, using their items and new ones in a Likert format. Approximately 800 students completed the revised love scale. Factor analysis of the items provided partial support for Lee's theory. The secondary styles of Mania, Pragma, and Agape emerged clearly as separate factors. However, each of the primary styles (Eros, Ludus, and Storge) tended to combine with another style instead of emerging as independent factors, and it was unclear whether Eros existed at all.

Theory building and construct measurement are joint bootstrap operations. From the previous results it was unclear whether the theory was partially wrong, or whether the mixed results were due to poor measurement scales. After much consideration of items, we concluded that there were enough questionable items to warrant scale revision. Consequently, the love scale was revised substantially, and the current research was based on this revision.

In addition, our previous study found fascinating gender differences on several of the love subscales. Males were clearly more ludic than females, but females were more pragmatic, storgic, and manic in love attitudes than males.

The intent of Study I was to devise a measurement instrument that would measure the six love styles/attitudes clearly, thereby providing evidence that the six different conceptions of love truly exist. Assuming that the love styles exist in fact, we were also interested in the general process of examining the domain of the theory of love styles. Toward that end, several background measures were taken that might be related conceptually to the love styles, including gender, ethnic differences, age, effects of previous and current love experiences, and level of self-esteem. This study was part of a larger study that also measured sexual attitudes. Only the love attitude data will be considered in the current report. Study II was a replication of Study I in a different geographical area with slightly revised scales.

### Study I

#### Method

A revised questionnaire entitled Attitudes About Love and Sex was developed based on the instrument used in our previous study (Hendrick et al., 1984). The questionnaire included a brief explanation about the study of attitudes, an 11-item Background Inventory, a section entitled

Love Attitudes Scale that contained 42 love items, and a section entitled Sexual Attitudes Scale that contained 58 sexual attitude items. The items in the attitude sections were rated on a 5-category basis that was transformed into a 5-point numerical basis for data analyses: 1 = *strongly agree*, 2 = *moderately agree*, 3 = *neutral*, 4 = *moderately disagree*, and 5 = *strongly disagree*. The responses to all items were made on machine-scorable answer sheets.

It should be noted that following the scaling tradition in this research, subjects were asked to complete the scale with the current love partner in mind, in so far as possible. To accommodate subjects not currently in love, the following instructions were included for completion of the love scale:

Some of the items refer to a specific love relationship, while others refer to general attitudes and beliefs about love. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never been in love, answer in terms of what you think your responses would most likely be.

The questionnaire was administered during the fall semester of 1983 and early spring semester of 1984 to groups of students taking introductory psychology at the University of Miami. A total of 807 students completed the entire questionnaire and were included for data analysis. In addition, during the spring semester, 112 of these students completed the questionnaire a second time at 4 to 6 week intervals in order to gather data for a test-retest reliability analysis. The test-retest subjects were told during the second session that we were interested in whether love and sex attitudes change over time and to complete the questionnaire in terms of their current feelings.

## Results

Each of the six love styles was measured by 7 items. The items, grand means, and standard deviations are shown in Table 1. Because of the way the items were scored (i.e., 1 = *strongly agree*, 5 = *strongly disagree*), the lower the score the more a subject subscribed to the love style measured by a given item. A perusal of the item means indicates that subjects tended to endorse the items positively. A large majority of the item means (except for Ludus) fell on the agreement side of the scale neutral point (i.e., 3). The fact that the grand means tended toward the center of the scale suggested that there were no problems of end effects or scale restriction. Also, the size of the standard deviations indicated that degree of agreement with a given item varied widely across subjects.

These descriptive data suggested that the items were quite suitable for intercorrelation and subsequent factor analysis.

### Sample Characteristics

The University of Miami is a large, urban, private university. It enrolls students from many states and has a large contingent of international students. Many Hispanic students, mostly Cuban, attend the University. Because large numbers of students take introductory psychology, the sample was reasonably representative of the student population. The great diversity of the student population was especially valuable in developing an instrument to measure love attitudes.

Selected sample characteristics were as follows. There were 466 males (58%) and 341 females (42%). Some 330 students

(41%) were age 18 or less, and some 235 students (29%) were age 19. The remaining 30% of the students were 20 or older. Most students were single and had never been married (96%). However, 16% stated they were now, or had in the past, lived with someone of the opposite sex. Males and females did not differ on this item. The ethnic heritage of the sample was as follows: Black (5.3%), White-non-Hispanic (50.4%), White-Hispanic (29.0%), Oriental (7.7%), Other (7.6%). A substantial 161 students (20%) indicated that they were international students. The religious heritage of the sample was as follows: Protestant (13.3%), Catholic (47.6%), Jewish (16.4%), None (4.7%), Other (18.1%).

One item asked students "How many times have you been in love?" Results were none (15.1%), one (36.8%), two (26.1%), three to five (17.7%), more than five (4.2%). Males and females differed on this item,  $\chi^2(4, N = 807) = 26.6, p < .01$ , with the difference showing up as greater extremes for males. By more than a 2:1 margin, males had either never been in love or had been in love three or more times.

Males and females also differed on the question "Are you in love now?" For males, 54.5% said *no* and 45.5% said *yes*. For females, 36.1% said *no* and 63.9% said *yes*,  $\chi^2(1, N = 807) = 26.2, p < .01$ . The same results occurred in a previous study (Hendrick et al., 1984).

A final background question attempted to measure self-esteem: "The way I feel about myself generally is." The great majority (84.6%) rated their esteem *very positive* or *positive*, and 12.4% rated themselves *neutral*. Only 24 students (3.0% of the sample) rated their esteem as *negative* or *very negative*.

### Factor Structure of the Love Items

The 42 items were intercorrelated and factored. Several possible principal component solutions were examined. The best solution extracted six factors, with unities in the diagonal, using varimax rotation of the factors. The factor loading for each item (on its factor) is shown in the third column of Table 1. Before rotation, the percent of total variance accounted for by each of the factors was as follows: Eros (6.2), Ludus (6.8), Storge (4.3), Pragma (9.3), Mania (4.8), Agape (12.9). Agape was the first factor extracted and (by definition) it accounted for the most variance. However, it is worth noting that this first factor was not very general and did not overshadow the other factors. Instead, the factors were roughly comparable in size, with only modest decreases in variance per factor. Further, all six factors accounted for a healthy 44.2% of the total variance.

The factor loadings shown in Table 1 were substantial. For the critical seven items that defined a love scale, in two cases (Ludus, Pragma), no loading was less than .50. For two others (Agape, Mania), only one of the seven items had a loading less than .50. Eros had two items loading at less than .50, and Storge had three such items. However, inspection of Storge suggests that it was a substantial factor.

The full factor matrix showed quite remarkable results. The 7 critical variables for a scale showed strong loadings on a factor, and the loadings for the remaining 35 variables were low on that factor, often approaching zero. Only two items were questionable. Item 5 (Eros) showed loadings of .25 to .35 on three other factors in addition to Eros. Item 36 (Agape) also showed a loading of

Table 1  
*Means, Standard Deviations, and Factor Loadings for the Love Attitude Items*

Item	Study I			Study II		
	<i>M</i>	<i>SD</i>	Factor loadings	<i>M</i>	<i>SD</i>	Factor loadings
<b>Eros</b>						
1. My lover and I were attracted to each other immediately after we first met.	2.4	1.2	.48	2.3	1.2	.53
2. My lover and I have the right physical "chemistry" between us.	2.0	1.0	.76	2.0	.9	.78
3. Our lovemaking is very intense and satisfying.	2.1	1.1	.68	2.1	1.1	.61
4. I feel that my lover and I were meant for each other.	2.2	1.1	.65	2.1	1.1	.64
5. My lover and I became physically involved very quickly. (My lover and I became emotionally involved rather quickly.)	3.0	1.4	.36	2.4	1.2	.37
6. My lover and I really understand each other.	2.1	1.1	.57	2.0	1.0	.56
7. My lover fits my ideal standards of physical beauty/handsomeness.	2.1	1.0	.59	1.9	1.0	.57
<b>Ludus</b>						
8. I try to keep my lover a little uncertain about my commitment to him/her.	3.2	1.3	.70	3.4	1.4	.61
9. I believe that what my lover doesn't know about me won't hurt him/her.	3.2	1.4	.67	3.6	1.4	.66
10. I have sometimes had to keep two of my lovers from finding out about each other.	3.6	1.5	.69	3.8	1.4	.68
11. I can get over love affairs pretty easily and quickly.	3.5	1.3	.55	3.9	1.2	.52
12. My lover would get upset if he/she knew of some of the things I've done with other people.	3.0	1.4	.57	3.1	1.4	.47
13. When my lover gets too dependent on me, I want to back off a little.	2.9	1.2	.50	3.0	1.3	.52
14. I enjoy playing the "game of love" with a number of different partners.	3.8	1.3	.72	4.2	1.2	.66
<b>Storge</b>						
15. I did not realize that I was in love until I actually had been for some time. (It is hard to say exactly where friendship ends and love begins.)	2.7	1.2	.36	2.5	1.2	.33
16. I cannot love unless I first had <i>caring</i> for awhile. (Genuine love first requires <i>caring</i> for awhile.)	2.2	1.1	.50	1.6	.9	.33
17. I still have good friendships with almost everyone with whom I have ever been involved in a love relationship. (I expect to always be friends with the one I love.)	2.5	1.2	.38	1.5	.9	.32
18. The best kind of love grows out of a long friendship.	2.3	1.2	.69	2.3	1.1	.76
19. It is hard to say exactly when my lover and I fell in love. (Our friendship merged gradually into love over time.)	2.6	1.1	.49	2.6	1.3	.77
20. Love is really a deep friendship, not a mysterious, mystical emotion.	2.5	1.3	.57	2.5	1.3	.56
21. My most satisfying love relationships have developed from good friendships.	2.5	1.2	.69	2.7	1.3	.80
<b>Pragma</b>						
22. I consider what a person is going to become in life before I commit myself to him/her.	3.1	1.3	.69	2.9	1.3	.58
23. I try to plan my life carefully before choosing a lover.	2.9	1.2	.68	2.8	1.2	.52
24. It is best to love someone with a similar background.	2.7	1.2	.54	2.6	1.1	.57
25. A main consideration in choosing a lover is how he/she reflects on my family.	3.2	1.2	.69	2.8	1.2	.73
26. An important factor in choosing a partner is whether or not he/she will be a good parent.	2.5	1.2	.69	2.0	1.0	.66

(Table 1 continues on next page.)

Table 1 (continued)

Item	Study I			Study II		
	<i>M</i>	<i>SD</i>	Factor loadings	<i>M</i>	<i>SD</i>	Factor loadings
<i>Pragma (continued)</i>						
27. One consideration in choosing a partner is how he/she will reflect on my career.	2.8	1.2	.72	2.5	1.1	.67
28. Before getting very involved with anyone, I try to figure out how compatible his/her hereditary background is with mine in case we ever have children.	3.3	1.2	.71	3.2	1.2	.56
<i>Mania</i>						
29. When things aren't right with my lover and me, my stomach gets upset.	3.0	1.3	.54	2.5	1.3	.54
30. When my love affairs break up, I get so depressed that I have even thought of suicide.	4.3	1.1	.45	4.1	1.2	.46
31. Sometimes I get so excited about being in love that I can't sleep.	2.7	1.2	.63	2.2	1.2	.64
32. When my lover doesn't pay attention to me, I feel sick all over.	3.0	1.2	.76	2.8	1.2	.74
33. When I am in love, I have trouble concentrating on anything else.	2.9	1.2	.67	2.7	1.2	.72
34. I cannot relax if I suspect that my lover is with someone else.	2.3	1.2	.58	2.2	1.2	.57
35. If my lover ignores me for a while, I sometimes do stupid things to get his/her attention back.	3.0	1.3	.59	2.8	1.2	.50
<i>Agape</i>						
36. I try to use my own strength to help my lover through difficult times. (I try to always help my lover through difficult times).	1.7	.8	.30	1.3	.6	.30
37. I would rather suffer myself than let my lover suffer.	2.2	1.0	.74	1.9	.9	.68
38. I cannot be happy unless I place my lover's happiness before my own.	2.6	1.1	.79	2.5	1.1	.83
39. I am usually willing to sacrifice my own wishes to let my lover achieve his/hers.	2.7	1.1	.77	2.4	1.0	.77
40. Whatever I own is my lover's to use as he/she chooses.	2.4	1.2	.67	2.4	1.2	.64
41. When my lover gets angry with me, I still love him/her fully and unconditionally.	2.1	1.0	.56	1.9	1.0	.52
42. I would endure all things for the sake of my lover.	2.8	1.2	.77	2.4	1.1	.69

Note. Items 5, 15, 16, 17, 19, 36 were revised from Study I to Study II. The revision is shown in parentheses. Under Study I, the data shown are for the original version of the item; under Study II, the data shown are for the revised item.

.39 on the Eros factor. After careful consideration, it was decided to retain these two items on their scales for further analyses.

### Formal Scale Analyses

Each of the love style scales was subjected to the standard reliability analysis of the Statistical Package for the Social Sciences (SPSS) program. In addition, test-retest correlations were obtained for a subsample of 112 subjects. The results are shown in the top panel of Table 2.

The alpha coefficients were substantial. All were .70+ except Storge, which was .62, a result consistent with the relatively lower factor loadings for the items on this scale (see Table 1). The test-retest correlations ranged from a low of .60 for Eros to a high of .78 for Pragma. Although based on a smaller *N*, which might have affected stability, these results suggested some relative shift-

ing of the love style scores on a short-term basis. One very tentative conclusion is that the love style scales are measures of relatively changeable attitudes, rather than indices of enduring personality traits.

Because of the nature of principal components factor analysis, the factors were orthogonal to each other. Thus, items with high loadings on one factor and low loadings on other factors would necessarily be relatively independent of each other. However, it does not follow that scale scores based on a sum of items (for specific factors) will be independent of each other. To assess degree of love scale independence, sum scores were computed for each of the six scales and intercorrelated. The results are shown in the top panel of Table 3.

Because of the large *N*, very small correlations were significant. Several of the significant correlations shown in Table 3 were trivial in size. The only scale with possible problems was Agape.

Table 2  
Reliability Analyses of the Love Scales

Measure	N	Eros	Ludus	Storge	Pragma	Mania	Agape
Study I							
Mean interitem correlation	807	.27	.31	.19	.38	.28	.43
Alpha	807	.70	.76	.62	.81	.73	.84
Standardized item alpha	807	.72	.76	.62	.81	.73	.84
Test-Retest correlations	112	.60	.72	.72	.78	.75	.73
Study II							
Mean interitem correlation	567	.26	.29	.24	.30	.27	.41
Alpha	567	.70	.74	.69	.74	.72	.83
Standardized item alpha	567	.71	.74	.68	.75	.72	.83
Test-Retest correlations	55	.74	.82	.74	.71	.70	.81

Note. There were seven items in each subscale. Test-retest correlations were based on the sum of the seven items.

It was significantly correlated with four of the other scales. However, the largest of these correlations (.30) accounted for only 9% of the variance in scale scores. It seems likely that the modest level of the correlations reflected the common method variance of the rating instrument.

In summary, the analyses suggested a viable set of scales to measure the six love styles. The scales emerged nicely from factor analysis of the items, demonstrated suitable internal reliability, and reasonable independence from each other when considered as additive scales.

### Background Variables and Attitudes

A number of specific questions pertaining to the subjects' background were included to assess in an orderly way some of the theoretical suppositions about how different love styles function. The approach used treated each background variable as an independent variable, using subjects' sum scores on a given love scale as a dependent variable. One-way analyses of variance were performed on the data for each love style. (Attempts at two-way analyses by crossing two independent variables yielded nonorthogonal effects because of the wide disparity in cell frequencies.)

Table 3  
Intercorrelations Among Love Scale Sum Scores

Scale	Ludus	Storge	Pragma	Mania	Agape
Study I					
Eros	.00	-.05	-.05	.07	.27*
Ludus	—	.03	.12*	-.05	-.28*
Storge	—	—	.23*	.06	.13*
Pragma	—	—	—	.11*	.05
Mania	—	—	—	—	.30*
Study II					
Eros	-.22*	-.04	-.04	.13*	.32*
Ludus	—	-.05	.09*	-.03	-.42*
Storge	—	—	.25*	.01	.15*
Pragma	—	—	—	.13*	.04
Mania	—	—	—	—	.23*

Note. N = 567 in Study II; N = 807 in Study I.

\*  $p < .01$ .

The means and  $F$  ratios for the six love styles are shown in Table 4 for several background variables. The  $F$  ratio for each one-way analysis is shown at the top of the relevant column of means. The means reported in Table 4 were derived by summing the seven items on a scale, and taking the average. Thus, means could vary from 1.0 to 5.0, and the lower the mean the stronger the particular love style.

It will be useful to consider the results in terms of the background variables.

*Age of subjects.* There were no significant main effects of age for any of the love styles. Therefore, the means of the love styles as a function of age are not reported in Table 4. There was of course not much variation in age for this college sample. The item was included to rule out shifts in preferred love styles from freshman to junior years. The lack of results suggests that such shifts did not occur.

*Gender differences.* Males were significantly more ludic than females. Females were significantly more storgic, pragmatic, and manic than males. Males and females did not differ on Eros and Agape. The pattern of these results was very similar to the outcome of a previous study (Hendrick et al., 1984).

*Ethnic background.* Two questions tapped ethnic/cultural background. One item stated "My ethnic heritage is," with five response categories. The second item stated "I am an international student" with *yes* or *no* response categories. For ethnic heritage, there were no differences on Ludus and Mania. For Eros, Black, White-non-Hispanic, and White-Hispanic students were at about the same level, whereas Oriental students were significantly less erotic in orientation. The omnibus category of "Other" yielded a mean similar to the Oriental mean, although due to small sample size for the Other category, its mean did not differ from the Black mean for Eros. As might be expected, there was also a tendency for Oriental students to be more storgic and pragmatic than were the other three ethnic groups. The tendency was strongest for Pragma. Finally, Black students were least agapic, although not all mean comparisons were significant due to the small number of Black subjects ( $N = 43$ ).

International students (a diverse grouping) rated themselves as less erotic, more ludic, storgic, and pragmatic than U.S. citizens. The two groupings did not differ on Mania or Agape.

*Number of times in love.* This question asked directly "How

many times have you been in love," and provided five response categories ranging from *none* to *more than five*. This last category was endorsed by only 34 of 807 subjects, and mean comparisons involving it were not very reliable. As expected, students who had never been in love were least erotic, and there were no differences between the Eros means for one, two, three to five, or five or more times in love. The critical cut was *none* versus all other categories.

Because Eros is supposed to value the intensity of love, then never to have been in love is never to have been an Eros. It was noted previously that relatively more males than females had never been in love before. However, because the difference between males and females for Eros was not significant, the results for number of times in love cannot be attributed to a confound with gender.

Ludus is theoretically conceived as "love as a game." Love affairs for Ludus types should not have the fire of passion that is true for Eros. In fact, depending on how a ludic person defines love, he or she should either have been in love many times (each casual affair is "love") or none (each casual affair is defined as a "casual affair"). The means for number of times in love showed precisely this result for Ludus. Subjects were significantly more

ludic if they had never been in love or had been in love five or more times, than were subjects in the intermediate categories. There were no differences due to number of times in love for Pragma. The main effect of Storge, though significant, did not suggest any particular interpretation of the means. There were significant main effects for both Mania and Agape. Subjects who had never been in love or who had been in love five or more times were less manic than the other groups. Also, as expected, subjects who had never been in love were less agapic than the other groups.

*Are you in love now?* This item was important for theory testing. It was expected that Eros types would tend to be in love, Ludus types would not, and because Storge is friendship and Pragma is practical, these two types would not differ. Predictions for Mania and Agape were uncertain. Turning the situation around in terms of the current independent-dependent variable convention, the following results emerged. Subjects "in love now" were more erotic, more storgic, more manic, more agapic, and less ludic than subjects "not in love now." Clearly, the perception of being currently in love (or not) cued off an entire response pattern that involved five of the six love styles. These results pose certain interesting theoretical issues to which we will return.

Table 4  
Study I: Means and F Ratios for Each Love Style as a Function Of Selected Background Variables

Variable	N	Love styles					
		Eros	Ludus	Storge	Pragma	Mania	Agape
Gender		$F = .7$	$F = 48.3^*$	$F = 4.4^*$	$F = 7.8^*$	$F = 3.8^*$	$F = 1.8$
Males	466	2.3	3.1 <sub>a</sub>	2.6 <sub>a</sub>	3.0 <sub>a</sub>	3.1 <sub>a</sub>	2.3
Females	341	2.3	3.6 <sub>b</sub>	2.5 <sub>b</sub>	2.8 <sub>b</sub>	3.0 <sub>b</sub>	2.4
Ethnicity		$F = 6.8^*$	$F = 1.0$	$F = 5.5^*$	$F = 11.9^*$	$F = 2.1$	$F = 2.6^*$
Black	43	2.3 <sub>ab</sub>	3.2	2.3 <sub>ab</sub>	3.0 <sub>ab</sub>	3.1	2.6 <sub>a</sub>
White-non-Hispanic	407	2.2 <sub>a</sub>	3.4	2.6 <sub>a</sub>	3.1 <sub>a</sub>	3.0	2.4 <sub>ab</sub>
White-Hispanic	234	2.3 <sub>ac</sub>	3.3	2.5 <sub>ab</sub>	2.9 <sub>c</sub>	3.1	2.3 <sub>b</sub>
Oriental	62	2.6 <sub>b</sub>	3.2	2.3 <sub>b</sub>	2.4 <sub>b</sub>	2.8	2.3 <sub>ab</sub>
Other	61	2.5 <sub>bc</sub>	3.3	2.3 <sub>b</sub>	2.6 <sub>bc</sub>	3.1	2.3 <sub>ab</sub>
International student		$F = 14.5^*$	$F = 13.0^*$	$F = 7.9^*$	$F = 31.9^*$	$F = 2.3$	$F = .2$
Yes	161	2.5 <sub>a</sub>	3.1 <sub>a</sub>	2.4 <sub>a</sub>	2.6 <sub>a</sub>	3.1	2.4
No	646	2.2 <sub>b</sub>	3.4 <sub>b</sub>	2.5 <sub>b</sub>	3.0 <sub>b</sub>	3.0	2.4
No. times in love		$F = 5.5^*$	$F = 10.7^*$	$F = 3.8^*$	$F = 1.4$	$F = 3.4^*$	$F = 11.9^*$
None	122	2.5 <sub>a</sub>	3.1 <sub>a</sub>	2.6 <sub>a</sub>	2.8	3.2 <sub>a</sub>	2.8 <sub>a</sub>
One	297	2.2 <sub>b</sub>	3.5 <sub>b</sub>	2.4 <sub>b</sub>	2.9	3.0 <sub>b</sub>	2.2 <sub>b</sub>
Two	211	2.3 <sub>b</sub>	3.4 <sub>b</sub>	2.4 <sub>b</sub>	2.9	3.0 <sub>b</sub>	2.3 <sub>b</sub>
3-5	143	2.1 <sub>b</sub>	3.4 <sub>b</sub>	2.6 <sub>ab</sub>	2.9	3.0 <sub>b</sub>	2.3 <sub>b</sub>
5 & up	34	2.2 <sub>ab</sub>	2.6 <sub>a</sub>	2.7 <sub>ab</sub>	3.1	3.2 <sub>ab</sub>	2.5 <sub>ab</sub>
In love now		$F = 79.7^*$	$F = 44.7^*$	$F = 4.2^*$	$F = .1$	$F = 7.1^*$	$F = 80.4^*$
No	377	2.5 <sub>a</sub>	3.1 <sub>a</sub>	2.6 <sub>a</sub>	2.9	3.1 <sub>a</sub>	2.7 <sub>a</sub>
Yes	430	2.1 <sub>b</sub>	3.5 <sub>b</sub>	2.5 <sub>b</sub>	2.9	3.0 <sub>b</sub>	2.1 <sub>b</sub>
Self-esteem		$F = 17.5^*$	$F = 5.1^*$	$F = .9$	$F = 1.0$	$F = 15.7^*$	$F = 1.9$
Very positive	251	2.1 <sub>a</sub>	3.2 <sub>a</sub>	2.5	2.9	3.2 <sub>a</sub>	2.4
Positive	432	2.3 <sub>b</sub>	3.4 <sub>b</sub>	2.5	2.9	3.0 <sub>b</sub>	2.4
Neutral or lower	124	2.5 <sub>c</sub>	3.5 <sub>b</sub>	2.5	3.0	2.8 <sub>c</sub>	2.2

Note. Means could vary from 1.0 to 5.0. The lower the mean, the greater the agreement with the given love style. Within each column, for each variable, means with no subscripts in common differed at the .05 level, either by the  $F$  test directly for a pair of means or by the Multiple Range Test for three or more means.

\*  $p < .05$ .

*Self-esteem.* Because of the low frequency of the subjects rating themselves as *negative* or *very negative* in self-esteem, these two categories were collapsed with *neutral* to form a category of *neutral or lower*. Clear predictions could be made for Eros and Mania. Eros gives fully, intensely, and takes risks in love—it requires substantial ego strength. Conversely, people high in self-esteem should more likely be erotic than people low in self-esteem. The same reasoning should apply in reverse for Mania. In fact, one reason manic lovers are manic is because of uncertainty of self in the relationship.

The results in Table 4 support these predictions. There was a clear positive relation between self-esteem and agreement with the Eros scale. There was a clear negative relation between self-esteem and agreement with the Mania scale. It is of interest to note that subjects with very positive self-esteem were more ludic than were either of the other two self-esteem groups. This result makes sense, but was not predicted. Apparently, it takes good ego strength to play seriously at love as a game.

There were no differences due to self-esteem on Storge, Pragma, or Agape. None was expected for Storge or Pragma; however, we rather expected people with very positive self-esteem to be more agapic. But such was not the case.

Although the results revealed success in the technical aspects of scale development as well as some theoretical confirmation of the love styles, it was felt that a confirmatory study was needed to substantiate Lee's theory and the Love Attitudes Scale as a major new development in research on love.

## Study II

### Method

The Love Attitudes Scale was subjected to limited revision. One item each from Eros and Agape was revised and four items from Storge were either partially or fully revised.

The new revision of the Attitudes About Love and Sex scale included a brief explanation about the study of attitudes, a 17-item Background Inventory (6 items added), a section entitled Love Attitudes Scale that contained 42 items, and a section entitled Sexual Attitudes Scale that contained 46 items. It was administered to students taking introductory psychology courses at Texas Tech University during the fall of 1984. The final sample consisted of 368 females and 199 males, 567 subjects in all. Selected sample characteristics showed differences from the two previous South Florida samples. Fewer students were Jewish (.7%) and more were Protestant (49%). More students were White-non-Hispanic (83%) and fewer were White-Hispanic (11%), Black (2.5%), and Oriental (2%). Fewer of the Texas students had never been in love or had been in love three or more times. The samples were relatively similar on other variables such as age and self-esteem.

### Results

Examination of the item means indicated that patterns of endorsement closely replicated those of Study I, though there was slightly more rejection of Ludus and slightly more endorsement of the other scales (see Table 1). The grand means, standard deviations, and factor loadings of the items are shown in the last three columns of Table 1. Revisions of items are shown in parentheses beneath the original items. Thus the final version of the scale is represented in Table 1.

The love scale was subjected to a principal components analysis

(as in Study I), and six factors were extracted. Before rotation, the percent of total variance accounted for by each factor was Eros (4.1), Ludus (8.5), Storge (4.5), Pragma (7.1), Mania (5.2), and Agape (13.6), accounting for 43.1% of the total variance (structure almost identical to that in Study I). The factor loadings nearly replicated those of Study I, with no loading on Ludus, Pragma, or Mania less than .45, and one Eros item, one Agape item, and three Storge items loading less than .45 (but above .30). The scale structure was very clear, with only four items loading on more than one factor. In each of the four cases, the item loaded most highly on its appropriate factor and had a negative loading on a second factor. These loading patterns were all conceptually congruent with Lee's theory.

Reliability analysis yielded standardized item alpha coefficients varying from .68 for Storge to .83 for Agape (similar to Study I, see Table 2). Test-retest reliability values (bottom panel of Table 2) indicated coefficients of .70 or above for all scales. Intercorrelations of summed scale scores revealed suitable independence and a pattern of correlations similar to that shown previously (see Table 3), although the correlation of Agape with Ludus was somewhat higher, probably due to the stronger rejection of Ludus by the sample.

One-way analyses of variance were performed on the background variable data for each love style, similar to the analyses of Study I. The results are shown in Table 5. Consistent with Study I, there were no meaningful age differences in love styles. There were gender differences on a number of background variables (including times in love, in love now, and self-esteem), as well as on five of the six love scales. Males were significantly more ludic (though both genders were above the mean of 3.0 and thus relatively rejected the ludic style), whereas females were more erotic, storgic, pragmatic, and manic than were males. The pattern of results replicated almost exactly the results of the previous studies. Although ethnic homogeneity precluded the broader analysis of ethnic groups presented in Study I, examination of White-Hispanic and White-non-Hispanic subjects showed the Hispanics to be significantly more ludic than the non-Hispanics.

Subjects who reported that they had never been in love were least endorsing of Eros and Agape, whereas subjects who had been in love twice were most endorsing of these two styles. There were also significant differences on Ludus, with those who had been in love three or more times most ludic (followed closely by those who had never been in love); those subjects who had been in love once were least ludic. Although significant differences did not appear on Storge or Mania, the results considered supportive of Lee's theory in Study I (results on Eros, Ludus, Agape) were replicated almost exactly in Study II.

For the question of whether a subject was in love at the time of testing, subjects "in love now" were more erotic and agapic and less ludic and pragmatic than subjects not in love. These results were very similar to those of Study I. For the self-esteem variable, whose results in Study I appeared to support Lee's theory (Eros high in self-esteem, Mania low in self-esteem), results of Study II were fully consistent. Subjects whose self-esteem was *very positive* most endorsed Eros (with the *neutral* category least endorsing), and those who were *neutral* in self-esteem most endorsed Mania (whereas *very positive* subjects endorsed it least).



Table 5  
 Study II: Means and *F* Ratios for Each Love Style as a Function Of Selected Background Variables

Variable	<i>N</i>	Love styles					
		Eros	Ludus	Storge	Pragma	Mania	Agape
Gender		<i>F</i> = 5.2*	<i>F</i> = 22.9*	<i>F</i> = 9.5*	<i>F</i> = 9.5*	<i>F</i> = 7.8*	<i>F</i> = 1.8
Males	199	2.2 <sub>a</sub>	3.3 <sub>a</sub>	2.4 <sub>a</sub>	2.8 <sub>a</sub>	2.9 <sub>a</sub>	2.2
Females	368	2.1 <sub>b</sub>	3.7 <sub>b</sub>	2.2 <sub>b</sub>	2.6 <sub>b</sub>	2.7 <sub>b</sub>	2.1
Ethnicity		<i>F</i> = .1	<i>F</i> = 7.3*	<i>F</i> = .1	<i>F</i> = .2	<i>F</i> = 1.1	<i>F</i> = .1
White-non-Hispanic	472	2.1	3.6 <sub>a</sub>	2.2	2.7	2.8	2.1
White-Hispanic	63	2.1	3.3 <sub>b</sub>	2.2	2.6	2.7	2.2
No. times in love		<i>F</i> = 7.0*	<i>F</i> = 4.8*	<i>F</i> = .2	<i>F</i> = .5	<i>F</i> = .6	<i>F</i> = 8.1*
None	68	2.4 <sub>a</sub>	3.4 <sub>ab</sub>	2.2	2.6	2.8	2.5 <sub>a</sub>
One	232	2.1 <sub>b</sub>	3.7 <sub>c</sub>	2.3	2.7	2.7	2.1 <sub>bc</sub>
Two	181	2.0 <sub>b</sub>	3.6 <sub>bc</sub>	2.2	2.7	2.8	2.0 <sub>c</sub>
3 or more	86	2.3 <sub>a</sub>	3.3 <sub>a</sub>	2.3	2.8	2.8	2.2 <sub>b</sub>
In love now		<i>F</i> = 99.7*	<i>F</i> = 28.7*	<i>F</i> = .4	<i>F</i> = 7.2*	<i>F</i> = .2	<i>F</i> = 78.5*
No	252	2.4 <sub>a</sub>	3.4 <sub>a</sub>	2.2	2.6 <sub>a</sub>	2.8	2.4 <sub>a</sub>
Yes	315	1.9 <sub>b</sub>	3.7 <sub>b</sub>	2.3	2.8 <sub>b</sub>	2.8	1.9 <sub>b</sub>
Self-esteem		<i>F</i> = 5.4*	<i>F</i> = .1	<i>F</i> = .4	<i>F</i> = .5	<i>F</i> = 8.7*	<i>F</i> = .6
Very positive	103	2.0 <sub>a</sub>	3.6	2.3	2.7	3.0 <sub>a</sub>	2.2
Positive	346	2.1 <sub>a</sub>	3.6	2.2	2.7	2.7 <sub>b</sub>	2.1
Neutral or lower	118	2.3 <sub>b</sub>	3.5	2.3	2.7	2.6 <sub>b</sub>	2.2

Note. Means could vary from 1.0 to 5.0. The lower the mean, the greater the agreement with the given love style. Within each column, for each variable, means with no subscripts in common differed at the .05 level, either by the *F* test directly for a pair of means or by the Multiple Range Test for three or more means.

\*  $p < .05$ .

Thus the results for Study II were almost fully consistent with those of Study I for the theoretically significant variables of gender, number of times in love, whether a subject was in love at the present time, and self-esteem. Several issues merit discussion, including technical aspects of scale development, the nature of the love style concepts, theoretical issues revolving around the love styles, and some notion about where this research will eventually lead. Results from the two studies are so similar that they can for the most part be discussed together.

## General Discussion

### Scale Construction

One strong motive for the present studies was the lack of factor clarity in Hendrick et al. (1984). It was unclear whether the theory of love styles was incorrect, or whether the measurement scale needed improvement. We opted for the second alternative, and the results from the current studies indicate that Lee's (1973/1976) theory is viable, and that each of the six concepts of love can be measured in a clear manner.

In terms of the various criteria for scale construction and validation, the results were about as good as can be expected from real data obtained from real subjects. With the changes made between Studies I and II, the love scale might be considered in a nearly final form at this point. Although more work should be done before it is used clinically, the scale is adequate in its present form as a research instrument for correlation with other scales, preselection of subjects, and so forth.

### What the Love Scales Measure

Careful perusal of the content of the items indicated that the evolution of item sets has remained faithful to the theoretical conception of each love style.

1. Eros: Strong physical preferences, early attraction, and intensity of emotion are attributes of erotic love, along with strong commitment to the lover. Love is highly valued by Eros types. The items in Table 1 reflect these attributes.

2. Ludus: Love as an interaction game to be played out with diverse partners appears to be the main attribute of Ludus types. Deception of the lover is acceptable within proper role limits. There is not great depth of feeling; indeed, the ludic lover is wary of emotional intensity from others. Ludic love has a manipulative quality to it. This aspect results in apparent lower social desirability, as reflected in the item means in Table 1. It is important to note, however, that there are ludic aspects to many, if not most, love relationships. Lee's (1973/1976) point was that this approach to love reflects an existing reality for many people. The items and their loadings in Table 1 suggest that this style was measured well.

3. Storge: This style reflects an inclination to merge love and friendship. There is no fire in storgic love; it is solid, down-to-earth, and presumably enduring. This "evolutionary" rather than "revolutionary" emphasis is reflected by most of the Storge items, several of which have extremely high loadings.

4. Pragma: Rational calculation with a focus on desired attributes of the lover is central to pragmatic love. In fact, "love planning" might be an apt description. Because Pragma types

use criteria matching, it is easy to view them as "computer matching" people. The items and loadings shown in Table 1 indicate that this love style was also well measured.

5. *Mania*: Reading the items suggests that *Mania* is "symptom love," based on uncertainty of self and the lover. It may be most characteristic of adolescents, but examples of older manic lovers frequently occur. The items and their factor loadings indicate success in construct measurement.

6. *Agape*: Lee did not find this style manifested fully in actual human beings. However, the factor results in Table 1 suggest that it is a viable style. Clearly it is an all-giving, nondemanding love. In fact, the item with a modest loading (Item 36) mentions "strength" (in Study I), a theme not occurring in any of the other *Agape* items. Even the item revision with "strength" deleted was somewhat low in its loading. Perhaps any item not denoting self-abnegation would load less strongly on *Agape*.

The conclusion of this detailed scrutiny is that the six love scales appear to be content valid as well as technically sound as measurement scales.

### *Personality or Attitudes?*

Do the love styles measure enduring personality traits or more transient attitudes? This interesting question cannot be answered definitively by the present studies. Lee (1973/1976) discussed the love styles as a typology. To psychologists this approach implies traits. But Lee also believed that it is possible to be simultaneously in one type of relationship with one person (e.g., erotic), and in another type (e.g., ludic) with a second person. This possibility implies that the cause of the love style lies in the nature of the relationship with another person.

Conceptually, it might be argued that love styles partake of both trait and state characteristics. One interesting aspect of the love styles is that they vary in emotional intensity. *Eros* and *Mania* are high in emotion, *Agape* is average, and *Ludus*, *Storge*, and *Pragma* are all low. To whatever extent emotional expressivity is a temperamental facet of the person, to that extent there may be a constitutional predisposition toward different love styles.

At the same time, data from the present study also point in an attitudinal direction. Ethnic and gender differences suggest the effects of socialization differences. The fascinating results for "are you in love now" also suggest an attitude conception of the love styles. Students in love now were "more" on several of the styles than students not in love now. In contrast, the self-esteem data may perhaps be interpreted as supporting a trait (personality) interpretation of the love styles (those endorsing *Eros* highest in self-esteem, those endorsing *Mania* lowest in self-esteem).

One theoretical approach is to consider the six love styles as reflecting a six-dimensional matrix in each person's psyche. Everyone has some location at a given time on each of the dimensions. Constitutional differences may tend to bolster one (or more) dimension. However, specific socialization practices also affect the development of the conceptual love matrix. Possibly some dimensions are more changeable by experience than other dimensions. Relative standing on the six dimensions may vary over time. Strong experience, such as "being in love now," may cause a flare-up on several dimensions, perhaps resulting in temporarily correlated dimensions that are uncorrelated under conditions of ordinary, nonintense emotional experience.

This theory needs much elaboration. But it does point the way toward an explanation of why the love styles seem to be both personality traits and malleable attitudes. We need not be forced to choose in an either/or fashion.

### *Further Theoretical Issues*

The results in Tables 4 and 5 bear on several issues that merit further consideration.

The mean differences in love styles between males and females replicated our previous work (Hendrick et al., 1984). Hatkoff and Lasswell (1979) found roughly similar gender differences. To an extent the differences in love attitudes parallel male-female differences in attitudes toward sexuality (e.g., Ferrell, Tolone, & Walsh, 1977; Laner, Laner, & Palmer, 1978; Medora & Woodward, 1982; Mercer & Kohn, 1979). In general, males are more permissive and instrumental in their sexual attitudes (Hendrick, Hendrick, Slapion-Foote, & Foote, 1985), a result consistent with males being more ludic in their love styles. Traditionally, females have been more conservative in sexual attitudes, a conservatism that partially stems from socialization to view sex as a precious commodity that must be guarded. Also, women have historically been socialized to marry both a love partner and a potential provider. From such a state of dependence on males, it would be surprising if females were not more pragmatic than males. The same reasoning may possibly account for females being more storgic than males. The same socialized dependency may also account for more manic attitudes by females, although this effect might be due to an artifact, namely that females report more symptoms in general than males. In any event, gender differences in love styles is an important topic worthy of more research effort.

The current studies merely suggest that ethnic differences in love styles may be a fruitful direction for future research. One interesting outcome in Study I was that Oriental students seemed relatively low in affect (low in *Eros*, high in *Storge* and *Pragma*). It may well be that the six love styles do not capture properly Oriental conceptions of love. In Study II, Hispanic subjects appeared more ludic than non-Hispanic subjects. Future cross-cultural research should be sensitive to the possibility that more than six styles exist and that different styles are relatively more dominant in different cultures.

It would appear, from this research, that the love styles are not independent of one's current love situation, or for that matter, the number of past love relationships. The issue merits further study. It would be desirable to monitor possible changes in love attitudes as a love relationship progresses from first encounter to binding commitment. The diverse results for "in love now" versus "not in love now" indicate that something important is going on. One theoretical interpretation was noted earlier; other possibilities should be examined.

### *Future Directions*

Research on attitudes toward love can lead in many directions: More work is needed to assess stability of love styles. If scores are relatively stable, then the scale could become a valuable tool for preselection of subjects for a wide variety of interaction stud-

ies. It is of great interest to investigate how well males and females with different dominant love styles "mesh," as compared with couples with similar styles.

Descriptive work on the love styles held by society would be of great value. It may be that (in Western society at least) people go through a kind of modal developmental sequence of love styles. As noted previously, manic love may be most characteristic of adolescents. In early adulthood the preferred style may evolve toward Eros, which in turn may evolve toward Storge and Pragma during the middle and later years. And we have all known at least one "old" couple who appeared very agapic. Such a developmental sequence would account for the common observation noted by Walster and Walster (1978) that what usually starts as passionate love (Eros) sooner or later settles down to companionate love (Storge, Pragma). If such a "love history" occurs for substantial numbers of people, then knowledge of the sequence could enable people to intervene to change (or come to terms with) their histories (e.g., see Gergen, 1973).

Thus, the ramifications for future research appear indefinitely broad in scope. We believe that all of them are worth pursuing. What is more important than love?

### References

- Berscheid, E., & Walster, E. (1974). A little bit about love. In T. L. Huston (Ed.), *Foundations of interpersonal attraction*. New York: Academic Press.
- Berscheid, E., & Walster, E. (1978). *Interpersonal attraction* (2nd ed.). Reading, MA: Addison-Wesley.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Wiley.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37, 12-24.
- Cook, M., & Wilson, G. (Eds.). (1979). *Love and attraction: An international conference*. Oxford: Pergamon Press.
- Dermer, M., & Pyszczynski, T. A. (1978). Effects of erotica upon men's loving and liking responses for women they love. *Journal of Personality and Social Psychology*, 36, 1302-1309.
- Dion, K. L., & Dion, K. K. (1973). Correlates of romantic love. *Journal of Consulting and Clinical Psychology*, 41, 51-56.
- Ferrell, M. A., Tolone, W. L., & Walsh, R. H. (1977). Maturational and societal changes in the sexual double-standard: A panel analysis (1967-1971; 1970-1974). *Journal of Marriage and the Family*, 39, 255-271.
- Gergen, K. J. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, 26, 309-320.
- Hatkoff, T. S., & Lasswell, T. E. (1979). Male-female similarities and differences in conceptualizing love. In M. Cook & G. Wilson (Eds.), *Love and attraction: An international conference*. Oxford: Pergamon Press.
- Hendrick, C., Hendrick, S., Foote, F. H., & Slapion-Foote, M. J. (1984). Do men and women love differently? *Journal of Social and Personal Relationships*, 1, 177-195.
- Hendrick, S., Hendrick, C., Slapion-Foote, M. J., & Foote, F. H. (1985). Gender differences in sexual attitudes. *Journal of Personality and Social Psychology*, 48, 1630-1642.
- Hill, C. T., Rubin, Z., & Peplau, L. A. (1976). Breakups before marriage: The end of 103 affairs. *Journal of Social Issues*, 32(1), 147-168.
- Hinkle, D. E., & Sporkowski, M. J. (1975). Attitudes toward love: A reexamination. *Journal of Marriage and the Family*, 37, 764-767.
- Kelley, H. H. (1983). Love and commitment. In H. H. Kelley, E. Berscheid, A. Christensen, J. H. Harvey, T. L. Huston, G. Levinger, E. McClintock, L. A. Peplau, & D. R. Peterson (Eds.), *Close relationships*. New York: Freeman.
- Laner, M. R., Laner, R. H., & Palmer, C. E. (1978). Permissive attitudes toward sexual behaviors: A clarification of theoretical explanations. *Journal of Sex Research*, 14, 137-144.
- Lasswell, T. E., & Lasswell, M. E. (1976). I love you but I'm not in love with you. *Journal of Marriage and Family Counseling*, 38, 211-224.
- Lee, J. A. (1973). *The colors of love: An exploration of the ways of loving*. Don Mills, Ontario: New Press. (Popular Edition, 1976).
- Medora, N., & Woodward, J. C. (1982). Premarital sexual opinions of undergraduate students at a midwestern university. *Adolescence*, 17, 213-224.
- Mercer, G. W., & Kohn, P. M. (1979). Gender differences in the integration of conservatism, sex urge, and sexual behaviors among college students. *Journal of Sex Research*, 15, 129-142.
- Munro, B., & Adams, G. R. (1978). Love American style: A test of role structure theory on changes in attitudes toward love. *Human Relations*, 31, 215-228.
- Rosenman, M. F. (1978). Liking, loving, and styles of loving. *Psychological Reports*, 42, 1243-1246.
- Rubin, Z. (1970). Measurement of romantic love. *Journal of Personality and Social Psychology*, 16, 265-273.
- Rubin, Z. (1973). *Liking and loving: An invitation to social psychology*. New York: Holt, Rinehart, and Winston.
- Rubin, Z. (1974). From liking to loving: Patterns of attraction in dating relationships. In T. L. Huston (Ed.), *Foundations of interpersonal attraction*. New York: Academic Press.
- Rubin, Z. (1984). Toward a science of relationships. *Contemporary Psychology*, 29, 856-858.
- Steck, L., Levitan, D., McLane, D., & Kelley, H. H. (1982). Care, need, and conceptions of love. *Journal of Personality and Social Psychology*, 43, 481-491.
- Sternberg, R. J., & Grajek, S. (1984). The nature of love. *Journal of Personality and Social Psychology*, 47, 312-329.
- Swenson, C. H. (1972). The behavior of love. In H. A. Otto (Ed.), *Love today*. New York: Association Press.
- Walster, E., & Walster, G. W. (1978). *A new look at love*. Reading, MA: Addison-Wesley.

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