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DISCRIMINANT MEASURES FOR DESPERATE LOVE

A Thesis Presented

By

MICHAEL BART SPERLING

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE

February 1983

Psychology

Michael Bart Sperling

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Approved as to style and content by:

Harold Raush, Chairperson of Committee

Harold Jarmon, Member

Marian L. MacDonald, Member

Arnold D. Well, Member

Bonnie R. Strickland, Chairperson
Department of Psychology

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Many have guided me over the years toward a richer understanding, both academically and interpersonally, of what it means to love another. This research is simultaneously an expression and examination of their influence.

To strive for intellectual rigor with a phenomenon so elusive and emotional as love has demanded teachers with curiosities beyond the bounds of their respective areas of expertise. Harold Raush, Marian MacDonald, Arnold Well and Harold Jarmon have shared their considerable depth and breadth of knowledge through challenging my work, yet continually supporting me. I thank them each for their unique contributions and their willingness to inform each other. In particular I am indebted to Harold Raush for helping me, through his wisdom, to expand the limits of my own wisdom. One rarely has the opportunity to be influenced by a person of such integrative knowledge and insight.

As for interpersonal experiences with loving, I look to a lifetime of relationships which have impacted upon this research. I thank my parents and siblings for setting the foundation, and friends and lovers for helping me to build upon it. Particularly important to my evolution through varying styles of love relating has been Lisa Rosenman. Her warmth, support and consistency have contributed enormously to my life and work.

ABSTRACT

Viewing desperate love as marked by insecurity, urgency, a great need for reciprocation, idealization and affective extremes, this study was designed to investigate the assumption that desperate love constitutes a manifestation of predispositional characteristics. The primary hypothesis is that people can be differentiated as tending or not tending toward the experiences of desperate love based upon significantly different patterns of response when describing characteristic qualities of the self and important others. A secondary hypothesis is that this differentiation is also reflected in a more romantic attitude toward love along the romantic-companionate continuum among those who tend toward desperate love.

A pretest group of approximately 1500 undergraduates was given a questionnaire measuring their position on a continuum from no experiences of desperate love to strong experiences. Those falling at the upper and lower ends of the scale, in addition to a random sampling, were selected and further divided into males and females to form six research groups with a total of 251 subjects. Several questionnaires were administered to the groups in follow-up sessions: a retest of the initial questionnaire; a survey of basic demographic data; the Marlowe-Crowne

Social Desirability Scale; the Knox-Sporakowski Attitudes Toward Love Scale; and the Characteristic Qualities Questionnaire. The latter consists of a subject's ratings of how characteristic or uncharacteristic each of eight qualities are for the self, ideal self, partner, ideal partner, mother and father.

The findings support the primary hypothesis. Specifically, analysis of variance performed between the groups for each item on the Characteristic Qualities Questionnaire yielded many significantly differentiating items for both genders. Discriminant analyses corroborated these results. The findings also support the secondary hypothesis. Few significant group differences were found on measures examining demographics or socially desirable responding.

This study can be taken as an indication that latent as well as manifest qualities differentiate someone who experiences desperate love. Examination of individual items on the Characteristic Qualities Questionnaire elucidates these underlying qualities, such as narcissism, anxious attachment, idealization and neediness.

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C H A P T E R I

INTRODUCTION

Within the broad configuration of styles of dyadic intimate relationships which people adopt throughout their lives, there is one that is marked by insecurity, urgency, a great need for reciprocation, idealization and affective extremes. Although most prevalent in the common years of transience in intimate relationships, adolescence and early adulthood, this style of relating can be present at any time throughout one's life. Prediction of when or with whom it may occur appears to be difficult. When it does occur, it seems clear that something very powerful is happening.

An example of this type of love relationship is the experience of a twenty-three year old male college student who had his first true love relationship at seventeen. He felt a strong bond with his partner the day after he met her. She made him feel remarkably good: "Just all my needs were filled--I felt like really, for the first time in my life, that I was a total person ... She just filled that void in me to be needed, to be wanted, that I never felt throughout growing up." When questioned as to what romantic love meant for him, he described it in the following manner: Involves commitment; the world becomes wonder-

ful; problems dissipate; "if something goes wrong it is O.K., I still have her."

Through autobiographical and fictional literature, in addition to research interviews and personal experience, I have been impressed with the fact that many people experience this type of love relationship very often in their lives, others experience it just once, and still others never have this particular experience.

I have chosen to call this style of love relationship "desperate love" because the term seems so aptly to convey the urgency about the relationship. Characteristic of the style are qualities such as a feeling of fusion with the lover, an overwhelming desire for and anxiety concerning reciprocation, idealization of the lover, feelings of insecurity outside the relationship such that life is experienced as so much better when involved in the relationship, difficulty with interpersonal reality testing, and extremes of happiness and sadness.

There has been very little research conducted on the area of love relationships in general, and even much less on desperate love. Fictional accounts through the ages are plentiful, but the scientific work is scant. Among the few who have written about styles of relationships roughly analogous to desperate love is Dorothy Tennov (1976). In Love and Limerence she uses the term "limerence" to connote the state of "being in love."¹ She describes certain basic

components of limerence, among them:

- intrusive thinking about the object of your passionate desire, who is a possible sexual partner
- acute longing for reciprocation
- dependency of mood on the loved one's actions or, more appropriately, your interpretation of the loved one's actions with respect to the probability of reciprocation
- some fleeting and transient relief from unrequited passion through vivid imagination of reciprocity of action by the loved one
- fear of rejection and sometimes incapacitating, but always unsettling shyness in the loved one's presence, especially in the beginning of the relationship and whenever uncertainty strikes
- acute sensitivity to any act or thought or condition that can be interpreted favorably
- bouyancy (a feeling of walking on air) when reciprocation seems evident
- a remarkable ability to emphasize what is truly admirable in the loved one and to avoid dwelling on the negative
- a general intensity of feeling that leaves other concerns in the background

John Alan Lee (1976), in Lovestyles, describes three primary and three secondary "colors" of love. One of the secondaries is what he calls mania, or obsessive love. He characterizes it in the following way: "In sharp contrast to the self-esteem, vanity, or quiet self-confidence which are typical of eros, ludus and storge, respectively, it is a deep sense of insufficiency and dependence on others which generates mania. The manic lover feels he is nobody until someone loves him; so he must find someone to love and then urgently implore that someone to love him in return."

John Bowlby (1973), in Attachment and Loss--Volume II Separation, describes the state of anxious attachment, a clinging type of behavior which can be seen at every age. He comments: "When we come to know a person of this sort it soon becomes evident that he has no confidence that his attachment figures will be accessible and responsive to him when he wants them to be, and that he has adopted a strategy of remaining in close proximity to them in order so far as possible to insure that they will be available."

Whether using the term desperate love, limerence, mania, or anxious attachment, the themes of insecurity, need for reciprocation, urgency and affective extremes are common throughout. Yet even with these broad similarities there are slight but important differences which have led to use of the term desperate love. For example, in addition to the illogical construction of the word, limerence

is a more general concept highlighting the need for reciprocity and affective extremes without adequately stressing the insecurity and neediness of the individual. In this sense desperate love can be thought of as a subset of limerence. Anxious attachment is described more as a style of behavior than a style of love relationship. It certainly is encompassed within the constellation of behaviors characteristic of desperate love, but is not unique to desperate love. Mania, or obsessive love, is basically descriptive of the identical phenomenon as desperate love. The objection to using this term is that it highlights the irrational, obsessive qualities which can characterize times of passion in any relationship rather than the neediness and insecurity. Though not a unique concept, the term desperate love does offer some variations on a widely experienced and little understood theme.

Although desperate love may be a very salient relational style for some people, there are many other styles. The primary styles of love which I view as meaningful for the purposes of this study are passionate love, romantic love, and conjugal or companionate love.

Berscheid and Walster (1978) speak of passionate love as "a wildly emotional state, a confusion of feelings: tenderness and sexuality, elation and pain, anxiety and relief, altruism and jealousy." The distinction between passionate and romantic love lies primarily in the issue of

whether the individual experiencing the love conforms to the romantic ideal, which can be seen as including "...the beliefs that love is fated and uncontrollable, that it strikes at first sight, transcends all social boundaries, and manifests itself in turbulent mixtures of agony and ecstasy" (Rubin, 1973). In this sense, passionate love would generally qualify as also descriptive of romantic love, yet romantic love would not necessarily be descriptive of passionate love. Companionate or conjugal love can be seen as the antithesis of romantic love (Knox and Sporakowski, 1968). Berscheid and Walster (1978) view companionate love as a "lower-key emotion" than passionate love, "it's friendly affection and deep attachment to someone."

Implicit, for the purposes of this study, within the concept of passionate, romantic, companionate and desperate love is the assumption that sexuality is involved in the relationship. However, the extent to which it is involved likely varies with the style. Although by definition it is a component of intimate relationships, it is not necessarily the most important one. It is often more significant for what it represents--reciprocation--than for the pure sexual pleasure (Tennov, 1979).

The question of individual characteristic types of love relating has not yet been adequately addressed. To this point desperate, passionate, romantic and companionate love have been discussed as concepts and as descriptive

terms applicable to styles of relating in reference to a particular relationship. Rather than view desperate love as a situational phenomenon, the assumption is made here that an individual who has strongly experienced desperate love will tend toward that style of relating in intimate love relationships. This does not mean that every intimate love relationship will necessarily have the characteristics of a desperate love relationship. Pilot interviews conducted with a small number of undergraduate students, some of whom had and some who had not experienced desperate love, indicate that those who had experienced it had only experienced it once, yet showed an overall pattern of conceiving of and approaching many potential relationships in a desperate love style. Furthermore, as discrete and orthogonal styles of love relating do not exist, desperate love can be conceived of as one among many styles. Although a tendency toward desperate love seems more homogeneous across a person's relational history than the other styles, one might imagine a continuum of styles. Along such a continuum, companionate love would be at one end, with passionate love at the other. Desperate love would fall at the extreme passionate love end, even though it is not in all respects an element of the same continuum.

What characteristics allow some persons to experience desperate love and others not, or more appropriately, what characteristics make some persons need in a very profound

way to experience desperate love? Many of the qualities of desperate love are associated with a first love relationship or with a childhood crush. Extremes of affect and poor reality testing are common during this period. In fact, adolescence is a time of testing various relational styles, exploring and evolving ways of being intimate with others. Yet for some this desperate style of relating persists (Tennov, 1979; Lee, 1976).

Pilot research interviews conducted prior to the present study revealed characteristics which were each apparent among some of the individuals who had experienced desperate love:

- higher self-esteem and more positive world view
when involved in the desperate love relationship
- strong, immediate bond formation
- early high peak of feelings for the loved one
- idealization of the loved one
- a difficulty maintaining boundaries in the
relationship
- a positive view of romantic love
- a tendency toward experiencing dichotomous
feelings in relationships
- difficulty with separations and loss

These individual characteristics provide the foundation for the assumption that desperate love is not merely a qualitative descriptor of a particular relationship, but

most often implies a style of love relating which is a manifestation of predictable and measurable individual characteristics. This differs from the notion of companionate and passionate love as situational descriptors of a particular relationship, with occasional generalizability to more global relational styles. According to this notion a person could experience, for example, a companionate love relationship with one partner and later a passionate love relationship with another partner. This person's style of love could be characterized as it pertains to the particular relationship, either companionate or passionate, but would not necessarily imply a general style across many relationships. Desperate love, on the other hand, is assumed to be less descriptive of a particular relationship, but rather most often a derivative of predispositional individual characteristics which lead a person to need and seek out this style of relating. Even though every relationship will not likely conform descriptively to desperate love, there is an underlying desire for this style of loving which remains unsatisfied.

The purpose of this study is to test the assumption that desperate love constitutes a manifestation of predispositional characteristics through examination of the differences in individual characteristics between those who tend toward the experience of desperate love and those who do not. The primary hypothesis of this investigation

is therefore that people can be differentiated as tending or not tending toward the experience of desperate love based upon significantly different patterns of response when describing characteristic qualities of the self and important others. A secondary hypothesis is that this differentiation will also be reflected in a more romantic attitude toward love along the romantic-companionate continuum among those who tend toward desperate love.

C H A P T E R I I

METHOD

Subjects

A Relationship Study Questionnaire (see below; also Appendix A) was administered to approximately 1500 undergraduate students in large psychology courses at the University of Massachusetts. The Questionnaire consisted of twelve items relating to desperate love, plus three demographic items (age, sex, marital status). Students were also asked if they were willing to participate further in the study for experimental credit if they met three criteria: (1) primarily heterosexual preference, (2) parents present or in close proximity throughout most of childhood, and (3) experience of at least one intimate sexual relationship lasting one month or longer.

On the above bases, 251 subjects of single marital status and of ages 17-22 were selected for further study. Subjects were divided into six groups based upon gender and performance on the Relationship Study Questionnaire. The first group comprised 44 men and the second group 44 women, all of whom had clearly experienced a desperate love style of relating. The third group of 31 men and the fourth group of 44 women had clearly not experienced desperate love. The fifth and sixth groups of 44 men and 44

women were randomly selected control groups. The intention was to generate groups of equal size, but difficulty with sampling enough male subjects dictated a smaller non-desperate love group.

Research Instruments

Relationship Study Questionnaire. The Relationship Study Questionnaire was designed to measure a person's relative tendency toward the experience of desperate love. It includes three demographic items (age, sex, marital status) and self-ratings on twelve qualities which are associated with desperate love. Subjects are asked to consider how they have related with partners in their most significant intimate relationships, and based on this they are to imagine an overall picture of their style of relating. The subject is then asked to rate on a nine point scale the degree to which each of the twelve qualities is characteristic of his/her style of relating. Ratings on the twelve items yield a desperate love score of between 12 and 108 for each individual. The desperate love groups consist of those with scores of 88 or higher, and the non-desperate love groups consist of those with scores of 65 or lower. These cutoff points were chosen based on indications that approximately 20% of the pretest population had scores above the upper point, and another 20% had scores below the lower point. The twelve qualities on the Question-

naire (Table 1), which resulted from pilot work and subsequent refinements, were adapted primarily from Tennov (1979), with the addition of a few items stressing insecurity and neediness. An attempt was made to balance the focus of the items between the five general themes of desperate love: urgency, insecurity, need for reciprocation, idealization and affective extremes.

Attitudes Toward Love Scale. The question of conformance to a romantic or companionate attitude toward love was examined through use of the Knox and Sporkowski (1968) Attitudes Toward Love Scale (Appendix B). This is a 29 item self-report questionnaire. The items are statements which reflect a romantic attitude toward love. An individual is asked to rate each item as to whether he/she agrees or disagrees. A low score indicates a romantic attitude toward love and a high score indicates a companionate attitude toward love.

Characteristic Qualities Questionnaire. Subjects completed six brief scales. The first four pertain to self, ideal self, most significant partner in an intimate relationship, and ideal partner; the two additional questionnaires pertain to mother and father. On each of the four scales, subjects rated eight items on a nine point scale, which allowed expression of how characteristic he/she believed the item to be. The mother and father scales

TABLE 1

The Twelve Items from the
Relationship Study Questionnaire

- persistent thoughts about the person you are involved with
- a great longing for the person to return your love
- a feeling of intense passion toward the person
- your moods being greatly affected by the actions of the person
- much fear of rejection
- many daydreams and fantasies about the person returning your love
- a need to spend as much time as possible with the person
- a feeling that you want to be as close as possible emotionally to the person
- a tendency to emphasize the good qualities in the person and to avoid dwelling on the negative
- a feeling that a relationship with the person fills a void in you, makes you feel much more secure and whole
- a general intensity of feelings such that other concerns seem unimportant
- a feeling you not only desire, but feel a powerful need to be in a very intimate relationship with the person

also consisted of eight items, similarly rated (see Table 2; also Appendix C). The selection of items was based upon consideration of those items theoretically most likely to discriminate between those who tend toward desperate love and those who do not. With the exception of items (d), (g) and (o), the assumption was made that the desperate love group would describe the quality as more characteristic than the random or non-desperate love groups. For the other items, the converse was assumed.

Other questionnaires. In addition to the above instruments, two additional questionnaires were used. A questionnaire on self and family data (Appendix D) consisted of questions on age, sex, marital status, religious identification, socioeconomic status, educational level of mother and father, parents' marital status during subject's childhood, number of siblings, and number of past and current intimate and love relationships. The Marlow-Crowne Social Desirability Scale (Appendix E), consisting of 33 items, was administered in order to examine the effect of socially desirable responding.

Procedures

Procedures for administration were identical for all groups. From three days to two weeks after initial administration of the Relationship Study Questionnaire,

TABLE 2

Items from the Characteristic
Qualities Questionnaire

Self, ideal self, lover and ideal lover scales:

- (a) can easily give love in relationships
- (b) is a unique individual who is very deserving of love from others in relationships
- (c) can easily engage in personal fantasy and daydreams, imaginary speculations
- (d) feels generally secure, satisfied with self
- (e) wants more love from others in relationships than usually gets
- (f) is very sensitive to goodbyes and separations, finds them difficult
- (g) expresses anger openly and directly
- (h) is defensive when criticized

Mother and father scales:

- (i) gave the feeling in childhood that you were not loved fully or enough
- (j) the love expressed toward you was inconsistent from one time to another, you were often unsure how you would be reacted to emotionally
- (k) often communicated in confusing ways, gave mixed messages which were hard to interpret
- (l) tended to project her/his own feelings and motivations onto others
- (m) wanted a close emotional relationship with you
- (n) concerned with her/his own adequacy as a person, compared her/himself to others
- (o) expressed anger openly and directly
- (p) was defensive when criticized

subjects selected for further participation were administered the remaining questionnaires. In sessions lasting approximately 45 minutes, groups of 5-15 subjects were each asked to read and sign an informed consent form (Appendix F), and complete the questionnaire on Self and Family Data, a retest of the Relationship Study Questionnaire, the Marlowe-Crowne Social Desirability Scale, the Attitudes Toward Love Scale, and the Characteristic Qualities Questionnaire. The order of administration of the six Characteristic Qualities scales were randomized across subjects. Following completion of the study, subjects were given a debriefing form (Appendix G) and any questions or comments were discussed.

C H A P T E R I I I

RESULTS

Computer analysis of the data utilized several of the procedures of SPSS (Statistical Package for the Social Sciences). Male and female groups were analyzed separately. The primary focus of the study concerns discrimination between groups, yet before presenting the major findings, some methodological issues will be considered.

Demographic Characteristics of the Research Groups

Male groups. Across the three male groups (desperate love, random and non-desperate love) the following profile was obtained: The mean age was 19 years (range from 17 to 22); religious identification was 45% Catholic, 24% Protestant, 13% Jewish, and 18% other or no identification; self-labelled socioeconomic status of household during childhood was 5% lower and lower middle class, 65% middle class, 29% upper middle class, and 1% upper class; and mean number of siblings, 2.4 (standard deviation of 1.1). In terms of relational history, the mean number of intimate relationships lasting one month or longer was 2.5 (standard deviation of 1.4), and the mean number of those relationships in which the respondent described himself as being in love was 1.3 (standard deviation of 0.9). Concerning current

involvement in an intimate relationship which has lasted for one month or longer, 61% said they were involved in a relationship, and of these, 80% described themselves as being in love.

With the exception of socioeconomic status, one-way analysis of variance performed between the three male groups yielded no F ratios with probabilities of less than .05. A main (or group) effect was indicated for socioeconomic status ($F(2, 116) = 3.08, p < .050$). However, characterization of the meaning of this small effect is difficult given the limited response range.

Female groups. Across the three female groups (desperate love, random and non-desperate love) the following profile was obtained: The average age was 19 years (range from 17 to 22); religious identification was 58% Catholic, 19% Jewish, 11% Protestant, and 12% other or no identification; self-labelled socioeconomic status of household during childhood was 6% lower and lower middle class, 61% middle class, 33% upper middle class, and 0% upper class; and mean number of siblings, 2.7 (standard deviation of 1.1). In terms of relational history the mean number of intimate relationships lasting one month or longer was 2.2 (standard deviation of 1.5) and the mean number of those relationships in which the respondent described herself as being in love was 1.3 (standard deviation of 1.0). Con-

cerning current involvement, 62% said they were involved in a relationship, and of these, 84% described themselves as being in love.

One-way analysis of variance performed between the three female groups for each of the demographic items yielded significant F ratios for two of the items; a significant main (or group) effect was indicated for the number of intimate relationships experienced which lasted one month or longer ($F(2, 129) = 3.13, p < .047$) and a significant effect was also indicated concerning the number of relationships in which the respondent described herself as having been in love ($F(2, 129) = 7.50, p < .001$). All other items showed no significant differences between the groups. Regarding the number of relationships experienced, the means for the desperate love, random and non-desperate love groups were 2.3, 2.5 and 1.7, respectively. t -tests indicate that this effect is attributable to differences between the random and non-desperate love groups ($t(86) = 2.47, p < .015$). For the number of these relationships described as being in love the means were 1.4, 1.6 and 0.9, respectively. Through t -tests this effect is indicated to be attributable to differences between the desperate love and non-desperate love groups ($t(86) = 3.12, p < .002$), and between the random and non-desperate love groups ($t(86) = 3.46, p < .001$).

Overall, the demographic characteristics of the male

and female groups show that within each gender few group differences are apparent. This indicates a relative homogeneity among the same gender groups concerning demographics.

Relationship Study Questionnaire Reliability

First and second administration differences. The mean scores from the first and second administrations of the Relationship Study Questionnaire varied systematically. Table 3 indicates the group means, standard deviations and t-test results of scores on the Questionnaire for the initial administration and subsequent retest. As the table shows, the scores on the second administration were lower than those on the first, with this downward shift being consistent for all six groups and falling within the range of 4 to 6 points. Subjects were thus less likely to report themselves as tending toward the desperate love end of the scale on the repeat administration. Standard deviations increased by 3 to 6 points. The largest standard deviations on both administrations fell within the male and female control groups. t-tests performed on each group to examine the administration differences indicate a 2-tail probability of less than .01 in each case.

Reliability measures. A test-retest Pearson correlation coefficient was computed for the three male groups pooled

TABLE 3

First and Second Administration Differences (Means, Standard Deviations, t-tests)
for the Relationship Study Questionnaire

<u>Group</u>	<u>1st</u> <u>Administration</u>		<u>2nd</u> <u>Administration</u>		<u>T-test</u>		
	<u>n</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>T-value</u> <u>df</u>	<u>2-tail</u> <u>prob</u>
<u>Male</u>							
Desperate love	44	99.25	5.30	90.41	8.76	4.09 43	.001
Random	44	79.75	13.89	70.70	16.12	3.20 43	.003
Non-desperate love	31	58.84	4.81	52.87	10.99	3.38 30	.002
<u>Female</u>							
Desperate love	44	93.82	4.57	89.82	8.27	3.70 43	.001
Random	44	76.64	11.34	71.82	14.74	4.34 43	.001
Non-desperate love	44	57.11	8.09	52.41	11.34	3.91 43	.001

Note. Each of the twelve items on the Questionnaire was rated on a nine point scale.
The mean scores reported above represent the total of a subject's rating on each item, with a minimum score of 12 at the non-desperate love end of the scale and a maximum score of 108 at the desperate love end.

($\underline{r}$ (119) = .91, $p < .001$), the three female groups pooled ($\underline{r}$ (132) = .92, $p < .001$), and for the entire research sampled pooled ($\underline{r}$ (119) = .92, $p < .001$). All three correlations are of a high magnitude. Interitem consistency on the second administration of the Relationship Study Questionnaire was examined using a coefficient alpha computed for the male groups pooled (coeff. alpha = .93) and the three female groups pooled (coeff. alpha = .92). These high item-total correlations indicate a homogeneity of the construct sampled by the Questionnaire.

Social Desirability

As measured by the Marlowe-Crowne Social Desirability Scale, socially desirable responding does not appear to be a significant confounding factor on the questionnaires. Table 4 shows the group means and standard deviations of scores on this Scale. As the Table indicates, the mean scores for the three male groups and for the three female groups are within 2 points, with those of the female groups being slightly higher. These means are fairly consistent with those reported by Crowne and Marlowe (1960) in their original standardization of the scale. Using a sample of 120 undergraduate subjects, they found a mean of 12.72 with a standard deviation of 5.78.

Analysis of variance performed for the three male groups and the three female groups yielded no significant

TABLE 4

Means and Standard Deviations of Scores on the
Marlowe-Crowne Social Desirability Scale

<u>Group</u>	<u>n</u>	<u>Mean score</u> ^a	<u>Standard deviation</u>
<u>Male</u>			
Desperate love	44	14.73	5.41
Random	44	13.39	4.82
Non-desperate love	31	15.45	5.22
<u>Female</u>			
Desperate love	44	14.59	3.57
Random	44	15.73	5.21
Non-desperate love	44	16.57	4.20

^aMaximum score = 33.

differences in social desirability scores among the desperate love, random and non-desperate love samples, indicating homogeneity among the groups in socially desirable responding. Correlations of scores on the Social Desirability Scale with those on the Relationship Study Questionnaire for the male groups and for the female groups indicate that the differences in socially desirable responding are not a confounding factor concerning group differences found on the other research questionnaires used. Correlations were of a low magnitude and not statistically significant for both the three male groups ($r(119) = -.08$, $p < .203$), and the three female groups ($r(132) = -.05$, $p < .299$).

Sample Differences in Attitude Toward Love

Mean group scores on the Attitudes Toward Love Scale (Table 5) indicate clear differences between the groups. Both the male and female desperate love groups show a more romantic attitude toward love than the corresponding random or non-desperate love groups. Across genders the mean scores for both random groups were similar, yet for the desperate love and non-desperate love groups the males scored approximately four points lower than females, reflecting a more romantic attitude toward love.

Normative data from Knox and Sporkowski (1968), designers of the scale, indicate that on a sample of 100

TABLE 5

Means and Standard Deviations of Scores on the
Attitudes Toward Love Scale

<u>Group</u>	<u>n</u>	<u>Mean score</u> ^a	<u>Standard deviation</u>
<u>Male</u>			
Desperate love	44	78.14	12.12
Random	44	86.07	10.72
Non-desperate love	31	87.39	12.63
<u>Female</u>			
Desperate love	44	82.09	13.04
Random	44	86.16	13.47
Non-desperate love	44	91.14	10.98

^aLow scores reflect a romantic attitude toward love (maximum score = 29) and high scores a companionate attitude toward love (maximum score = 145).

male and 100 female undergraduates, the males had a mean score of 94.45 with a standard deviation of 13.86, while the females had a mean score of 98.86 with a standard deviation of 13.81. Based on these data, the hypothesis that no significant relationship exists between attitude toward love and sex of the respondent was rejected at the .05 level. In the present study there is virtually no difference between the male and female random groups in attitude toward love, although both groups do show a more romantic attitude toward love than in the normative sample.

Analysis of variance performed separately for the male and female groups in the present study indicates significant group differences for both genders. For the three male groups the F ratio (2, 116) was 7.32 ($p < .001$), and for the three female groups the F ratio (2, 129) was 5.74 ($p < .004$). To clarify the source of these differences, t -tests were performed on the groups. As shown in Table 6, for the male groups the pairwise mean differences are significant when comparing the desperate love to the random and non-desperate love groups, and for the females there is a significant mean difference between the desperate love and non-desperate love groups.

Group Differences in Characteristic Qualities Ratings

Analysis of variance was performed for each item on each of the Characteristic Qualities Scales in order to

TABLE 6

t-tests of Group Mean Scores for the Attitudes Toward Love Scale

<u>Groups</u>	<u>df</u>	<u>t</u>	<u>p^a</u>
Male			
Desperate love--Non-desperate love	73	3.20	.002
Desperate love--Random	86	3.25	.002
Random--Non-desperate love	73	0.32	n.s.
Female			
Desperate love--Non-desperate love	86	3.52	.001
Desperate love--Random	86	1.44	n.s.
Random--Non-desperate love	86	1.90	n.s.

^aProbability levels are two-tailed.

examine the differences in means between desperate love, random and non-desperate love groups. Table 7 indicates the F ratios for the comparison of group means for each item on each of the self, ideal self, partner and ideal partner scales. Table 8 indicates the F ratios for the mother and father scales. It should be remembered that the eight items [(a) through (h)] for each of the self, ideal self, partner and ideal partner scales are identical, as are the eight items [(i) through (p)] for the mother and father scales.

Item (a)--can easily give love in relationships. There are no significant differences in response to this item between the male groups. For the female groups, the self, ideal self, partner and ideal partner scales all show significant differences.

Item (b)--is a unique individual who is very deserving of love from others in relationships. This item shows significant male group differences among the self and ideal self scales. The self and ideal partner scales show significant differences between the female groups.

Item (c)--can easily engage in personal fantasy and day-dreams, imaginary speculations. Among both the male and female groups, there are significant group differences on each of the self, ideal self, partner and ideal partner scales.

TABLE 7

F Ratios of Analysis of Variance between the Desperate Love, Non-desperate Love and Random Groups on the Self, Ideal Self, Partner and Ideal Partner Scales of the Characteristic Qualities Questionnaire

Male Groups

<u>Item</u>	<u>Self</u>	<u>Scales</u>	
		<u>Ideal Self</u>	<u>Partner</u>
(a)	2.94	1.89	1.28
(b)	3.20*	3.50*	0.19
(c)	5.33**	4.33*	5.22**
(d)	1.04	3.56*	0.90
(e)	9.68**	5.31**	3.06*
(f)	13.95**	4.99**	0.76
(g)	0.08	0.40	0.27
(h)	2.33	0.36	0.30

Note. Degrees of freedom are 2, 116.

Note. The eight items for each of the self, ideal self, partner and ideal partner scales are identical.

* $p < .05$

** $p < .01$

TABLE 7 (continued)

Female Groups

<u>Item</u>	<u>Scales</u>			
	<u>Self</u>	<u>Ideal Self</u>	<u>Partner</u>	<u>Ideal Partner</u>
(a)	14.85**	5.67**	6.28**	7.77**
(b)	4.65*	2.37	2.13	5.62**
(c)	5.95**	8.76**	4.09*	11.85**
(d)	2.82	0.32	1.35	0.54
(e)	7.92**	0.75	0.56	2.17
(f)	14.79**	5.85**	4.40*	10.98**
(g)	0.42	0.37	0.37	0.54
(h)	0.86	1.11	0.01	1.18

Note. Degrees of freedom are 2, 129.
Note. The eight items for each of the self, ideal self, partner and ideal partner scales are identical.

*p < .05
 **p < .01

TABLE 8

F Ratios of Analysis of Variance between the
Desperate Love, Non-desperate Love and Random Groups
on the Mother and Father Scales of the
Characteristic Qualities Questionnaire

<u>Item</u>	<u>Male Groups</u>	
	<u>Scales</u>	
	<u>Mother</u>	<u>Father</u>
(i)	0.40	0.48
(j)	0.28	0.46
(k)	0.42	0.53
(l)	0.02	0.59
(m)	3.85*	2.84
(n)	3.14*	1.63
(o)	0.18	0.38
(p)	0.59	1.60

Note. Degrees of freedom are 2, 116.

Note. The eight items for both the mother and father
scales are identical.

* $p < .05$

** $p < .01$

TABLE 8 (continued)

<u>Item</u>	<u>Female Groups</u>	
	<u>Mother</u>	<u>Scales</u> <u>Father</u>
(i)	0.87	2.54
(j)	0.83	1.57
(k)	0.62	0.55
(l)	0.68	1.20
(m)	0.76	0.76
(n)	0.06	0.32
(o)	0.93	1.05
(p)	2.70	0.44

Note. Degrees of freedom are 2, 129.

Note. The eight items for both the mother and father scales are identical.

* $p < .05$

** $p < .01$

Item (d)--feels generally secure, satisfied with self.

There is a significant difference between the male groups for the ideal self scale, and no significant differences between the female groups.

Item (e)--wants more love from others in relationships than usually gets. Significant differences between the male groups are apparent for the self, ideal self, partner and ideal partner scales. Between the female groups, only the self scale shows a significant difference.

Item (f)--is very sensitive to goodbyes and separations, finds them difficult. Between male groups, the self, ideal self and ideal partner scales show significant differences. Between the female groups, the self, ideal self, partner and ideal partner scales show significant differences.

Item (m)--wanted a close emotional relationship with you. Between the male groups, the mother scale shows a significant difference for this item, while the female groups show no significant differences.

Item (n)--concerned with his/her own adequacy as a person compared him/herself to others. Between the male groups there is a significant difference for the mother scale, with the female groups showing no significant differences.

Items (g), (h), (i), (j), (k), (l), (o) and (p). No significant differences are apparent among the male or female groups for these items.

Item summary--male groups. Across the self, ideal self, partner and ideal partner scales, items (c), (e) and (f) show the greatest number of significant differences due to group assignment for males, indicating a more frequent ability to differentiate between the groups. Items (b) and (d) also show significant differences due to group assignment, though restricted to fewer of the scales. No significant differences are indicated for items (a), (g) and (h). Examination of all the items on a particular scale reveals the self, ideal self, partner and ideal partner scales to have four, five, two and three items, respectively, which show significant differences. Concerning the mother and father scales, many fewer significant differences are apparent. On the mother scale items (m) and (n) show a significant difference, while on the father scale no items show a significant difference.

Item summary--female groups. Across the self, ideal self, partner and ideal partner scales, items (a), (c) and (f) have the greatest number of significant differences due to group assignment for the females, indicating a more frequent ability to differentiate between the groups. Items (b) and (e) also show significant differences due to group

assignment which are limited to fewer of the scales. No significant differences are indicated for items (d), (g) and (h). Examination of all the items on a particular scale reveals the self, ideal self, partner and ideal partner scales to have five, three, three and four items, respectively, which show significant differences. For the mother and father scales, no significant differences are apparent.

Mean item ratings and patterns--male groups. The means and standard deviations of item responses for the male groups are reported in Appendix H. Of the items on the self, ideal self, partner and ideal partner scales which show a significant difference between groups, all follow the predicted pattern of response. This pattern is that the desperate love group described the items (qualities) as more characteristic of the referent of the scale than the random or non-desperate love groups, except for item (d), in which the predicted pattern was the converse. Of the items on the mother scale which show a significant difference, item (m) follows the predicted pattern of the desperate love group describing the quality as more characteristic of the their mother, but item (n) does not. As noted earlier, no significant differences are apparent for the father scale.

Mean item ratings and patterns--female groups. The means

and standard deviations of item responses for the female groups are reported in Appendix I. Of the items on the self, ideal self, partner and ideal partner scales which show a significant difference between groups, all follow the predicted pattern of response. This pattern is that the desperate love group described the quality as more characteristic of the referent of the scale than the random or non-desperate love groups. As noted earlier, no significant differences are apparent for the mother or father scales.

t-tests--male groups. Appendix J reports t-tests results for pairwise mean comparisons between groups on the sixteen items having a significant F ratio. For the desperate love--random group comparisons, 68% of the items show significant group differences. For the desperate love--non-desperate love comparisons, 81% of the items show significant group differences. For the random--non-desperate love comparisons, 6% of the items show significant group differences. These results indicate a strong pairwise differentiation in response to the Characteristic Qualities Questionnaire between the desperate love and other groups, with little differentiation between the random and non-desperate love groups.

t-tests--female groups. Appendix K reports t-test results for pairwise mean comparisons between groups on the fifteen

items having a significant F ratio. For the desperate love--random group comparisons, 40% of the items show significant group differences. For the desperate love--non-desperate love comparisons, 100% of the items show significant group differences. For the random--non-desperate love comparisons, 67% of the items show significant group differences. These results indicate that the strongest pairwise differentiation in response to the Characteristic Qualities Questionnaire is between the desperate love and non-desperate love groups, with less frequent differentiation between these two and the random groups.

Discriminant Analysis

In addition to analysis of variance and t -tests, the ability of items on the Characteristic Qualities Questionnaire to differentiate between the desperate love and non-desperate love groups was examined through discriminant analysis. Using items from the self, ideal self, partner and ideal partner scales, discriminant functions were derived for the male desperate love and non-desperate love groups and for the female desperate love and non-desperate love groups.² They were then reapplied to the samples in order to classify subjects into their probable group membership on the basis of responses to the Questionnaire. Hence, the results of the classification procedure can

be taken as a measure of the discrimination ability of the function, which is itself an aggregate derivative of the discrimination ability of the individual items.

Three types of discriminant analyses were performed: (1) deriving a function based upon all subjects and all items from the scales, and classifying using these same subjects, (2) deriving a function based upon half the subjects in the groups and all items from the scales, and classifying using the other half of subjects (cross-validation), and (3) deriving a function based upon half the subjects in the groups and selected items from the scales, and classifying using the other half of subjects (cross-validation).

Classification using all subjects and all items. Discriminant functions were derived using all subjects from the desperate love and non-desperate love groups and all items from the self, ideal self, partner and ideal partner scales. For the males the discriminant function was statistically significant ($\Lambda = .347$; $\chi^2 (32) = 59.3$, $p < .002$) and accounted for 65.3% of the variance between groups, and for the females the discriminant function was statistically significant ($\Lambda = .307$; $\chi^2 (32) = 81.5$, $p < .001$) and accounted for 69.3% of the variance between groups. As Table 9 indicates, the percent of correct classification for predicted versus actual group membership

TABLE 9

Discriminant Analysis Classification Results for
Desperate Love and Non-desperate Love Groups Using the
Self, Ideal Self, Partner and Ideal Partner Scales

<u>Actual Group</u>	<u>n</u>	<u>Predicted Group Membership</u>	
		<u>Desperate love</u>	<u>Non-desperate love</u>
<u>Male</u>			
Desperate love	44	93.2%	6.8%
Non-desperate love	31	12.9%	87.1%
<u>Female</u>			
Desperate love	44	95.5%	4.5%
Non-desperate love	44	6.8%	93.2%

Note. Discriminant functions were computed using all items from the self, ideal self, partner and ideal partner scales.

was quite high for both males and females. This suggests that the functions were quite powerful in their predictive ability when classifying data from the same subjects as those upon which the function was derived. Examination of the standardized discriminant function coefficients showed there to be little correspondence between those items which discriminated based on analysis of variance versus those items which contributed most to the discriminant function.

Classification using cross-validation of subjects and all items. Discriminant functions were derived using a random half of the subjects from the desperate love and non-desperate love groups and all items from the self, ideal self, partner and ideal partner scales. The functions were then tested on the other half of subjects. For the males the discriminant function was statistically significant ($\Lambda = .035$; $\chi^2 (32) = 67.0$, $p < .001$) and accounted for 96.5% of the variance between the groups based on the random half of the sample, and for the females the discriminant function was statistically significant ($\Lambda = .127$; $\chi^2 (32) = 51.6$, $p < .015$) and accounted for 87.3% of the variance between the groups based on the random half of the sample. As Table 10 indicates, the percent of correct classification for predicted versus actual group membership for the second half of the sample was variable for both males and females. The function for the male groups shows

TABLE 10

Cross-validation Discriminant Analysis Classification
Results for Desperate Love and Non-desperate Love Groups
Using the Self, Ideal Self, Partner and
Ideal Partner Scales

<u>Actual Group</u>	<u>n</u>	<u>Predicted Group Membership</u>	
		<u>Desperate love</u>	<u>Non-desperate love</u>
<u>Male</u>			
Desperate love	22	63.6%	36.4%
Non-desperate love	15	61.5%	38.5%
<u>Female</u>			
Desperate love	22	77.3%	22.7%
Non-desperate love	22	50.0%	50.0%

Note. In the above analyses, the discriminant function was computed using all items from the self, ideal self, partner and ideal partner scales, and based upon a random half of subjects in each group. Classification was completed by applying the function to the second half of subjects in each group.

some minor predictive ability in the desperate love case, though a below chance prediction is present in the non-desperate love case. The function for the female groups shows a moderate predictive ability in the desperate love case, with chance level prediction in the non-desperate love case. Thus it appears that with the more rigorous cross-validation method, discrimination ability for the second halves is problematic, particularly in the non-desperate love case. As with the first set of analyses, there was little correspondence between those items which discriminated based on analysis of variance versus those which contributed most to the discriminant function.

Classification using cross-validation of subjects and selected items. Discriminant functions were derived using a random half of the subjects from the desperate love and non-desperate love groups and selected items from the self, ideal self, partner and ideal partner scales. Selection of approximately half of the original thirty-two items used in the previous analyses was based on those items which showed significant group differences ($p < .05$) for a random half of subjects, as measured by analysis of variance. For the male groups, the seven items used were (c), (e) and (f) on the self scale, (e) on the ideal self scale, (e) on the partner scale, and (c) and (f) on the ideal partner scale. For the female groups, the thirteen items

used were (a), (c), (e) and (f) on the self scale, (b), (c) and (f) on the ideal self scale, (a) and (f) on the partner scale, and (a), (b), (c), and (f) on the ideal partner scale. All items found to show significant group differences among half the sample were among those found to show significant group differences among the entire sample, except item (b) on the female ideal self scale. For the males the discriminant function was statistically significant ($\Lambda = .437$; $\chi^2 (2) = 26.9$, $p < .001$) and accounted for 56.3% of the variance between the groups based on the random half of the sample, and for the females the discriminant function was statistically significant ($\Lambda = .434$, $\chi^2 (13) = 29.6$, $p < .005$) and accounted for 56.6% of the variance between the groups based on the random half of the sample. As Table 11 indicates, the percent of correct classification for predicted versus actual group membership for the second half of subjects was fairly high. For both males and females, in the desperate love case the predictive ability of the functions is somewhat similar to that in the previous cross-validation analyses using all items from the scales. In the non-desperate love case a large dissimilarity is apparent concerning the predictive ability. Whereas the previous analyses yielded below chance results, the present analyses yielded a high percent of correct classification.

TABLE 11

Discriminant Analysis Classification Results for
Desperate Love and Non-desperate Love Groups Using
Selected Items from the Self, Ideal Self,
Partner and Ideal Partner Scales

<u>Actual Group</u>	<u>n</u>	<u>Predicted Group Membership</u>	
		<u>Desperate love</u>	<u>Non-desperate love</u>
<u>Male</u>			
Desperate love	22	81.8%	18.2%
Non-desperate love	15	7.7%	92.3%
<u>Female</u>			
Desperate love	22	77.3%	22.7%
Non-desperate love	22	18.2%	81.8%

Note. In the above analyses, the discriminant function was computed using selected items from the self, ideal self, partner and ideal partner scales, and was based upon a random half of subjects in each group. The selected items were those which showed significant group differences according to analysis of variance performed on these random halves. Classification was completed by applying the function to the second half of subjects in each group.

C H A P T E R I V

DISCUSSION

The findings outlined in Chapter III support the primary hypothesis of this investigation that people can be differentiated as tending or not tending toward the experience of desperate love based on significantly different patterns of response when describing characteristic qualities of the self and important others. Additionally, there is support for the secondary hypothesis that this differentiation will also be reflected in a more romantic attitude toward love along the romantic--companionate continuum among those who tend toward desperate love versus those who do not. Of greater interest, and the first area for discussion, is the question of the particular ways in which the results support these hypotheses. Discussion will later focus on methodological issues concerning the questionnaires.

Primary Hypothesis of Differentiation Based on Characteristic Qualities

Support for this hypothesis derives from the findings that approximately half the items on each of the self, ideal self, partner and ideal partner scales show significant group differences, with the trend in mean response among groups conforming to the predicted pattern. With the excep-

tion of items (g) and (h), the other six items all show systematic group differences on at least one of the four scales. On the mother and father scales, only two items show significant group differences. As thirty-two separate analyses of variance were performed for each gender on the items of the self, ideal self, partner and ideal partner scales, one might well expect a few statistically significant differences to be attributed to chance factors. Yet the fact that almost half of these items show significant differences is a compelling argument that a factor beyond that of chance is present. This argument does not as readily hold for the mother and father scales, in which case one must consider the possibility that the findings are attributable to chance factors.

An important point to be mindful of is that differentiation, or discrimination, is the aim of the present study. To say that a quality is more salient for the desperate love group than for the others doesn't speak to the question of which qualities are most salient across the desperate love group. Since some of the qualities were formulated to be particularly characteristic of desperate love and some particularly uncharacteristic, and given the fact that the design was not constructed for the purpose of within groups comparisons, such comparisons are not made.

As the items on the Questionnaire were intended to reflect qualities which might likely be differentially

salient for those who experience desperate love and those who do not, the findings can be taken as an indication that latent as well as manifest qualities differentiate someone who experiences desperate love. The discussion of individual items that follows is intended to elucidate the issue of what latent qualities underlie persons who tend toward the experience of desperate love.

Item (a) - can easily give love in relationships. While this quality did not differentiate among the male groups, it did differentiate among the female groups on all scales. The assumption behind it is that the fusion and high degree of passion in desperate love would lead a person to more readily perceive him/herself, his/her partner, and the ideals as more easily able to give love. In fact, this could even be construed as a profound need to give and receive love. Of course in all relationships there is a desire and at times a need to give love, but in desperate love it becomes more of a necessity. As to the fact that no significant differences were present between the male groups, one can speculate that cultural norms regarding expression of love account for this finding. Perhaps men are more culturally reinforced to not readily acknowledge or express their affect.

Item (b) - is a unique individual who is very deserving of love from others in relationships. Lee (1976) connoted

that the manic (or desperate) lover "must find someone to love him and then urgently implore that someone to love him in return." As such a position of neediness is difficult to endure, a counterbalancing force would likely be present. This quality was designed to tap into the sense of narcissism which seems to be salient for those experiencing desperate love, and which acts as a dichotomous yet related factor with neediness. Both in reference to the self and in reference to the other, the quality of being a unique individual who is very deserving of love from others implies a degree of narcissism. In other words, there is a sense of entitlement to the partner's affections, as well as the attribution that the partner is entitled to the desperate lover's affections. While the findings are not consistent across all scales, the fact that significant differences do exist between groups for the male self and ideal self scales and the female self and ideal partner scales indicates that characteristic differences may be explained by this theme.

Item (c) - can easily engage in personal fantasy and day-dreams, imaginary speculations. This quality shows strong differentiation between groups on all scales for both males and females. This effect was predicted because of one of the distinguishing characteristics of desperate love,

idealization. The quality of idealization was observed in the pilot interviews, mentioned earlier, to be particularly salient for those experiencing desperate love. The lover was put on a pedestal and spoken of in glowing, all positive terms. Negative description was markedly absent. No doubt idealization fuels the sense of narcissism spoken of above, but it also allows the lover's actions to be construed as all good and reciprocal. However appealing this may sound, it is in reality unlikely. Given the need for reciprocity in desperate love, Tennov's (1979) description of limerence (which is in many ways similar to desperate love) provides some insight as to why it would be salient. She speaks of "some fleeting and transient relief from unrequited passion through vivid imagination of reciprocity of action by the loved one." Hence imagination can be used as a means to experience the pleasure of reciprocity, which can't always be derived from reality, while also guaranteeing that one doesn't have to actually struggle for such a high degree of reciprocity. If you can't always get what you want in reality, then what better way to get it than imagine it. Such primary process thought is the infant's first tool to effect gratification from the objects in its environment. As we mature, this cognitive style is relegated increasingly to dreams. Yet perhaps in people who experience desperate love versus others who don't there is a higher frequency of primary process thought, especial-

ly when used in the service of relational outcomes which are difficult to achieve.

Item (d) - feels generally secure, satisfied with self.

This quality was intended to tap into the neediness and problematic sense of self thought to be present in those experiencing desperate love. Lee (1976) posits that it is a "deep sense of insufficiency and dependence on others which generates mania," or desperate love. This argues for desperate love as a manifestation of underlying predispositional characteristics. It was therefore predicted that the quality would be less characteristic of those experiencing desperate love. This was in fact true at a statistically significant level for the males' description of the ideal self, but was not significantly apparent in any other cases. One could interpret this finding as evidence that the quality has little discrimination potential, but it is also quite likely that a person who experiences desperate love would have difficulty recognizing and acknowledging particular insecurity or dissatisfaction with self.

Item (e) - wants more love from others in relationships

than usually gets. This quality, which especially for males highly discriminates between groups, was formulated based upon the assumption that no matter what amount of love is given in a desperate love relationship, it is never enough. The idea is that desperate loving acts to fill a

void in a person--whether it is a need for love itself or a need for love to fill another emptiness is unclear. Nevertheless, what a person feels is an insatiable desire for a fulfilling love, a desire which likely predates the particular desperate love relationship. This need for unlimited loving would account for the discrimination on the male self and ideal self scales, and the female self scale, but is not so clearly applied to the findings of discrimination on the male partner and ideal partner scales. Even though the means on these scales were lower than those on the self scale, indicating that the quality was perceived as relatively less characteristic for the partner, the fact of discrimination still indicates differential group responses. Although this can be taken as an indication that in desperate love relationships the partner does want more love than is received, another contributing factor arises from the process of projection, or more specifically what object relations theorists describe as projective identification. When rating qualities, the subject is basing his/her evaluation on his/her perception of the other's dynamics. This perception would take into account both a construal of reality grounded factors and also attributions that the other has the same feelings, thoughts and wishes. The implication is that the degree to which a quality is characteristic of the self impacts upon assessments of others. Support for this notion is found in the fact that

of all items on the self, ideal self, partner and ideal partner scales, 70% of those which were significant on the self or ideal self scales were also significant on the partner or ideal partner scales.

Item (f) - is very sensitive to goodbyes and separations, finds them difficult. This quality, which shows very strong discrimination across almost all scales for both genders, speaks to the issue of fusion in a desperate love relationship and consequences resulting from withdrawal of fusion. As observed from the pilot interviews, in addition to a difficulty with separations and loss, persons experiencing desperate love showed a difficulty maintaining boundaries in the relationship. In order to allow for such a high degree of interdependence, boundaries between individuals could not sustain the flexibility characteristic of a relational style like companionate love. Boundaries which become rigid and fixed in a position of great interdependence do not allow for deviation from this relational structure. Hence separations and loss are diligently guarded against, rendering brief goodbyes and separations tantamount to a more final loss. This quality is characterized by Bowlby (1973) as anxious attachment, a state wherein a person "has no confidence that his attachment figures will be accessible and responsive ... and adopts a strategy of remaining in close proximity to them in order

to insure that they will be available." As a child develops, the boundaries governing attachment to parental figures become increasingly diffuse, allowing for anxiety-free exploration and new attachments. In intimate relationships one generally re-experiences some of the anxiety around attachment characteristic of parental relations.

What seems apparent in desperate love is that as closeness with the attachment figure is so highly valued and desired, an unusually high level of anxiety is experienced around actual or perceived loss.

Item (m) - wanted a close emotional relationship with you.

Although no items on the mother or father scales show discrimination for the female groups, this quality is one of two which differentiate between the male groups. All eight qualities on the scales were formulated on the assumption that early experiences with relating are a contributing factor in determining later relational styles. Therefore, if a person who tends toward the experience of desperate love shows distinguishable characteristic qualities, the parents of such a person should be perceived as showing characteristic qualities which are distinguishable. The present quality, concerning mother's desire for a close emotional relationship, derives from the characteristic of a need for great interdependence in desperate love relationships. It was thought that this need might be fomented

by an early pattern of mother desiring particular closeness with her son. However, given the paucity of significant differences on the sixteen analyses of variance performed for each gender on the mother and father scales, it is difficult to assess whether the group differences in response to this quality are attributable to the construct being measured or to chance factors.

Item (n) - concerned with her own adequacy as a person, compared herself with others. This quality is a derivative of item (d) concerning sense of security and self-satisfaction. The present item taps into mother's sense of self by referring to her concern with her own adequacy. Though a significant group difference was found, the difference is between the non-desperate love and the other groups, as the mean response for the desperate love group was similar to that of the random group. This indicates that this item is not a useful discriminating quality for desperate love.

Items (g), (h), (i), (j), (k), (l), (o) and (p). The fact that none of these items show significant differences can be attributed to one or more of three possibilities:

(1) there in fact are no characteristic differences between groups pertaining to the item; (2) the wording of the item was confusing, or demanded too high a degree of psychological sophistication such that the characteristic it was designed to pertain to was different from that understood

by the subject; (3) the content that the item was tapping into was too psychologically charged and rendered objective evaluation by the subject impossible. The lack of significant differences on items (g) and (h) from the self, ideal self, partner and ideal partner scales is less surprising than the almost total lack of differences among items (i) through (p) from the mother and father scales. Although one cannot rule out applicability of the first and third explanations above, the second explanation is quite plausible in reference to the mother and father scales. Items (i), (j), (k) and (l) in particular demand a psychological sophistication and clinical judgement which may not be common among college undergraduates.

Discriminant analysis. The discriminant analysis was employed to support the findings that many items on the self, ideal self, partner and ideal partner scales of the Characteristic Qualities Questionnaire show significant group differences. Whereas the analysis of variance and t-tests examine each item separately, discriminant analysis uses a composite of items in order to differentiate subjects according to group assignment. This process of differentiation can be likened to the case of a correlation analysis using a two group dichotomous criterion variable (VandeGeer, 1971).

The three types of analyses performed support the

argument for acceptance of the primary hypothesis of differentiation between groups. Particularly the first and third show strong evidence of discrimination.

The classification results from the first analyses, which used all items and all subjects, indicate a very high discrimination ability for both genders. While the correct classification percentages of between 87.1 and 95.5% are persuasive, these findings may be spuriously high when considering possible generalizability to other samples. The discriminant function certainly differentiated quite well among the subjects upon which the function was derived, but would such a high level be maintained when applying the function to a sample other than that upon which it was formed? Sampling limitations didn't permit such a test on a completely new group of subjects, but in the second analyses a similar cross-validation procedure was used upon the extant sample.

In this second case the function was derived from a random half of the sample, using all items as in the previous analyses, and was applied to the other half of the sample for classification. This approach yielded findings which are quite a bit weaker for both genders. This might be explained by (1) the increasing rigor of the analyses, (2) the halving of the sample size upon which the functions were derived, or (3) an overall weak discrimination ability of some or all items on the Questionnaire.

In order to elucidate these possible explanations, a final set of analyses was performed using the same cross-validation procedure, but deriving the function based on selected variables which showed significant group differences according to analysis of variance for the random half of the sample. As might be expected, the number of group differences which proved statistically significant for half the sample was less than that for the entire sample, especially for the male groups. Nevertheless, the functions formed on the basis of these items show strong correct classification percentages for both genders which improve upon the weak findings of the second analyses, particularly in the non-desperate love case. These results lend support to the third explanation outlined above, specifically the assertion of weak discrimination ability in some, but not all, of the items. The large improvement in classification between the two cross-validation analyses is indicative of the fact that the strong and generalizable discrimination ability among those individual items with significant group differences was confounded when other items were also used in deriving the discriminant functions.

The utility of the percent of variance between the groups accounted for by each function is problematic in this two group case of discriminant analysis. The percent of variance accounted for, as derived from the canon-

ical correlation coefficient, will be spuriously high given few subjects or many items since you are capitalizing on the variability. Yet a high correlation will not necessarily reflect strong predictive power. This was the case in the second group of analyses, in which the subject to variables ratio was half that in the first and third analyses. In the second analyses, approximately 90% of the variance was accounted for and the percentages of correct classification were either weak or below chance. While the percent of variance accounted for in the first and third analyses was in the 55-70% range, the predictive ability of these functions was high.

Another statistic of the first and second discriminant analyses which is misleading is the standardized discriminant function coefficient. This coefficient is generally interpreted as an indicator of the relative contribution of each variable to the discriminant function, and is similar to b weights in multiple correlation. However, since a number of the predictor variables overlap and are moderately correlated (especially each item across the four scales), one wouldn't expect individual item weights for discriminant analysis to correspond to those items showing significant group differences for analysis of variance. Therefore statements concerning the relative contribution of each item cannot be made.

Secondary Hypothesis of Differentiation
Based on Attitude Toward Love

Support for this hypothesis derives from the findings that for both genders there are significant differences between the desperate love and non-desperate love groups in attitude toward love, and additionally for the males there is a significant difference between the desperate love and random group. As predicted, these differences show the desperate love groups to be more romantic in attitude toward love than the random or non-random love groups. The romantic ideal can be seen as a culturally generated and reinforced norm for intimate love relating which places value on the mysterious, non-reality grounded aspects of love. This conforms to the notion of idealization and lack of reality grounding as being a central feature of desperate love.

The finding of differentiation based on attitude toward love is not a major one, in that the concept of the romantic ideal seems inextricably tied to the feelings and cognitions of desperate love. It would have been in fact quite surprising to find no differences, or a trend in another direction. Still, the finding corroborates the concept of desperate love which has been developed throughout.

Concerning the fact that the random groups from the present study show a more romantic attitude toward love

than the normative sample of Knox and Sporkowski (1968), both cultural and procedural factors need to be considered. First, the romantic ideal is a culturally bound concept, whether influenced by various geographic, ethnic, religious, moral or temporal factors. Each of these factors, separately or in combination, could potentially cause a good deal of variability between unmatched samples. Second, the Attitudes Toward Love Scale was administered to subjects in the present study after the retest of the Relationship Study Questionnaire. Since items on that Questionnaire are skewed in the direction of desperate love, subjects may have approached the Attitudes Toward Love Scale with a cognitive set more in conformance with the romantic ideal than usual.

Methodological Issues

Relationship Study Questionnaire. In terms of reliability, the Relationship Study Questionnaire seems quite sound. The high test-retest coefficients are indicative of this fact. Even though there was a downward shift in scores from the first to the second administration, this variation was systematic in nature. The administration differences are likely attributable to a lesser novelty effect on repeat administration. Additionally, since the coefficient alphas indicate a homogeneity of the construct sampled by the Questionnaire, it is likely that a similar construct

was being sampled for each group. The question of what that construct is relates to the issue of validity. The intention was certainly that this construct should be the experience of desperate love. Although the Questionnaire was not formulated using factor analytic and validity testing procedures, as this would constitute a major study in itself, later findings of differentiation on the Characteristic Qualities Questionnaire support the validity of the initial Relationship Study Questionnaire as a differentiation measure.

Demographics and social desirability. Findings from the questionnaire on self and family data and from the Marlowe-Crowne Social Desirability Scale indicate few significant differences between the groups in demographics or socially desirable responding. This supports the notion that the findings of significant group differences for the primary and secondary hypotheses reflect an effect which is due to desperate love rather than other confounding factors.

Gender differences. As examination of gender differences was not a focus of the present study, data were neither analyzed nor discussed to this end. However, qualitative examination of the results leads to the speculation that major sex differences do not exist in response to the various questionnaires. Further study would certainly be required before definitive statements concerning this

speculation could be made.

Conclusions

The present study demonstrates that manifest qualities of people who tend toward the experience of desperate love can be distinguished from qualities of those who do not. Further, there is support for the view that desperate love represents a derivative of underlying predispositional phenomena such as narcissism, anxious attachment, idealization and neediness. All of the questionnaires administered provide corroborating evidence for the above conclusions.

The Characteristic Qualities Questionnaire supported the primary hypothesis that people can be differentiated as tending or not tending toward desperate love based on significantly different patterns of response when describing qualities of the self and important others. Specifically, analysis of variance performed between the desperate love, random and non-desperate love groups for each item on each scale yielded many significantly differentiating items. Discriminant analyses performed between the desperate love and non-desperate love groups for each gender indicated that the discriminant functions showed high percentages of correct classification. This finding was maintained even when a more rigorous cross-validation procedure was employed for classification. The Attitudes Toward Love Scale supported the secondary hypothesis that

differentiation is also reflected in a more romantic attitude toward love among those who tend toward desperate love. Results on the questionnaires examining demographics and socially desirable responding indicated few significant differences on these measures, supporting the notion that the findings of significant group differences for the primary and secondary hypotheses reflect an effect which is due to desperate love rather than other confounding factors. Finally, the initial Relationship Study Questionnaire proved to be both a reliable instrument, as indicated by a high test-retest correlation and a high coefficient alpha, and a valid differentiation tool, as evidenced by the group responses to the later questionnaires.

Implications for the study include clinical as well as research applications. Clinically, accurate understanding of the predispositional characteristics which lead one to tend toward desperate love can aid in therapy with those who experience marked difficulty with this style of love relating. In terms of research, the data base in the present study can be used to investigate gender differences and formulate more precise survey instruments. There are also several questions for further research which arise. Among these are the correlation between hypnotic susceptibility and desperate love (as suggested by Freud, 1951), and the relational changes over time of couples in which at least one partner is experiencing desperate love (as pat-

terned after the relational charting with randomly selected couples of Levinger, 1980). Another area for examination is object relations theory as it informs discussion of the etiology of desperate love (Kernberg, 1976). Of particular interest are factors in childhood development which impact upon the predispositional qualities leading to desperate love.

FOOTNOTES

¹Tennov has said she coined the term limerence because "it was pronounceable and seemed to me and to two students to have a 'fitting' sound." Since her rationale is questionable and in fact the term offers no intuitive sense of meaning, I use it only when needed to refer to her work and not as a generic term.

²The random group was not used in the discriminant analysis since it is not in fact a "middle" group. Even though the random group means on the questionnaires are generally in the middle of the desperate love and non-desperate love group means, on the basis of Characteristic Qualities Questionnaire responses some of its members would logically be considered members of other groups during classification, as it represents a random sampling across the desperate love continuum.

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APPENDIX A

Relationship Study

This is a preliminary questionnaire designed to help ascertain which people might be appropriate for a research study currently being carried out in the Department of Psychology on intimate relationships. Although voluntary, your honest responses to the questions below would be greatly appreciated. This questionnaire will be kept completely confidential.

Age (round to the nearest year) _____

Sex: M _____ F _____

Marital Status: Single _____ Married _____
Divorced _____ Separated _____

The next questions concern your style of relating to partners in intimate relationships. For the purposes of this questionnaire, an intimate relationship should be thought of as a close relationship with a single partner in which there is some sexual attraction. To think about your style of relating, consider the way you have related to partners in the one, two or three most significant, intense, intimate relationships you have had. Of course, the way you relate to someone is probably different in some ways each time it happens, but for now try to imagine an overall picture of your style of relating based upon a few of the most significant relationships in your life.

Twelve qualities of a style of relating are listed below. For each you should think about how much the quality is characteristic of your style of relating. In other words, how well does this quality describe the way you approach an intimate relationship. You should then rank each quality according to the nine point scale below, where a rating of 1 should indicate that the quality is not at all characteristic of your style of relating and a rating of 9 indicates that the quality is extremely characteristic of your style of relating. You can choose whichever whole number from 1 to 9 best fits each of the twelve qualities.

Based upon the way you think about and relate to partners in your most significant intimate relationships, how characteristic are each of the following qualities to your overall style of relating:

	<u>Rating</u>
--persistent thoughts about the person you are involved with	/____/
--a great longing for the person to return your love	/____/
--a feeling of intense passion toward the person	/____/
--your moods being greatly affected by the actions of the person	/____/
--much fear of rejection	/____/
--many daydreams and fantasies about the person returning your love	/____/
--a need to spend as much time as possible with the person	/____/
--a feeling that you want to be as close as possible emotionally to the person	/____/
--a tendency to emphasize the good qualities in the person and to avoid dwelling on the negative	/____/

--a feeling that a relationship with the person fills a void in you, makes you feel much more secure and whole

/ _____/

--a general intensity of feelings such that other concerns seem unimportant

/ _____/

--a feeling that you not only desire, but feel a powerful need to be in a very intimate relationship with the person

/ _____/

Thank you for filling out this questionnaire. Based upon the particular needs of the research study being carried out, it will be possible for some people to participate further in this study. This would involve completing a number of questionnaires, much like this one. It would take approximately 45 minutes and offer one experimental credit. For the present time we are interested in people whose sexual preference is primarily heterosexual (members of the opposite sex), who had both parents present or in close proximity throughout most of their childhood, and who have experienced at least one intimate sexual relationship lasting one month or longer.

If you meet the above criteria and would be willing to participate further in this study, please write down your student number. We will return to this class within a few weeks to let you know if your further participation will be requested. As mentioned above, all information will be kept strictly confidential.

Student No. _____

Number of this Psych. course _____

APPENDIX B

Attitudes Toward Love

Please read each statement carefully and choose the number which you believe most adequately represents your opinion, then record this number for each question on your answer sheet.

- (1) Strongly agree (definitely yes)
- (2) Mildly agree (I believe so)
- (3) Undecided (not sure)
- (4) Mildly disagree (probably not)
- (5) Strongly disagree (definitely not)

- 59. When you are really in love, you just aren't interested in anyone else.
- 60. Love doesn't make sense. It just is.
- 61. When you fall head-over-heels-in-love, it's sure to be the real thing.
- 62. Love isn't anything you can really study; it is too highly emotional to be subject to scientific observation.
- 63. To be in love with someone without marriage is a tragedy.
- 64. When love hits, you know it.
- 65. Common interests are really unimportant; as long as each of you is truly in love, you will adjust.
- 66. It doesn't matter if you marry after you have known your partner for only a short time as long as you know you are in love.
- 67. As long as two people love each other, the religious differences they have really do not matter.
- 68. You can love someone even though you do not like any of that person's friends.
- 69. When you are in love, you are usually in a daze.
- 70. Love at first sight is often the deepest and most enduring type of love.

71. Usually there are only one or two people in the world whom you could really love and could really be happy with.
72. Regardless of other factors, if you truly love another person, that is enough to marry that person.
73. It is necessary to be in love with the one you marry to be happy.
74. When you are separated from the love partner, the rest of the world seems dull and unsatisfying.
75. Parents should not advise their children whom to date; they have forgotten what it is like to be in love.
76. Love is regarded as a primary motive for marriage, which is good.
77. When you love a person, you think of marrying that person.
78. Somewhere there is an ideal mate for most people. The problem is just finding that one.
79. Jealousy usually varies directly with love; that is, the more in love you are, the greater the tendency for you to become jealous.
80. Love is best described as an exciting thing rather than a calm thing.
81. There are probably only a few people that any one person can fall in love with.
82. When you are in love, your judgment is usually not too clear.
83. Love often comes but once in a lifetime.
84. You can't make yourself love someone; it just comes or it doesn't.
85. Differences in social class and religion are of small importance in selecting a marriage partner as compared with love.
86. Day dreaming usually comes along with being in love.
87. When you are in love, you don't have to ask yourself a bunch of questions about love; you will just know that you are in love.

When you have completed this questionnaire, bring this booklet and your answer sheet to the person administering this session. You will be asked to take a short break and then complete one last questionnaire.

APPENDIX C

Characteristic Qualities Questionnaire

The following pages contain a number of qualities which may or may not be characteristic of yourself and other people in your life. For each you will be asked to rate how characteristic, neutral or uncharacteristic that particular quality is for the person being described. You will rate the qualities based upon the nine point scale below:

Student Number _____

Name _____

Psychology Course No. _____

Consider your ideal self as the person for whom you will be rating the qualities below. Think about how you would ideally like your personality and the way you relate to partners in intimate sexual relationships to be, and then rate each item according to the nine point scale below:

	Rating
--can easily give love in relationships	/____/
--is a unique individual who is very deserving of love from others in relationships	/____/
--can easily engage in personal fantasy and daydreams, imaginary speculations	/____/
--feels generally secure, satisfied with self	/____/
--wants more love from others in relationships than usually gets	/____/
--is very sensitive to goodbyes and separations, finds them difficult	/____/
--expresses anger openly and directly	/____/
--is defensive when criticized	/____/

Consider your partner in the most intense, significant intimate sexual relationship you have had or are currently involved in as the person for whom you will be rating the qualities below. Think about his/her personality and how he/she related to you, and then rate each item according to the nine point scale below:

	Rating
--can easily give love in relationships	/____/
--is a unique individual who is very deserving of love from others in relationships	/____/
--can easily engage in personal fantasy and daydreams, imaginary speculations	/____/
--feels generally secure, satisfied with self	/____/
--wants more love from others in relationships than usually gets	/____/
--is very sensitive to goodbyes and separations, finds them difficult	/____/
--expresses anger openly and directly	/____/
--is defensive when criticized	/____/

Consider your image of the ideal partner in an intense, significant intimate sexual relationship as the person for whom you will be rating the qualities below. Think about how you would ideally like this partner's personality to be and how you would like him/her to relate to you in an intimate sexual relationship, and then rate each item according to the nine point scale below:

	Rating
--can easily give love in relationships	/____/
--is a unique individual who is very deserving of love from others in relationships	/____/
--can easily engage in personal fantasy and daydreams, imaginary speculations	/____/
--feels generally secure, satisfied with self	/____/
--wants more love from others in relationships than usually gets	/____/
--is very sensitive to goodbyes and separations, finds them difficult	/____/
--expresses anger openly and directly	/____/
--is defensive when criticized	/____/

Consider your mother as she was throughout your childhood as the person for whom you will be rating the qualities below. Think about her personality and the way she related to you when you were a child, and then rate each item according to the nine point scale below:

	<u>Rating</u>
--gave the feeling in childhood that you were not loved fully or enough	/____/
--the love expressed toward you was inconsistent from one time to another, you were often unsure how you would be reacted to emotionally	/____/
--often communicated in confusing ways, gave mixed messages which were hard to interpret	/____/
--tended to project her own feelings and motivations onto others	/____/
--wanted a close emotional relationship with you	/____/
--concerned with her own adequacy as a person, compared herself to others	/____/
--expressed anger openly and directly	/____/
--was defensive when criticized	/____/

Consider your father as he was throughout your childhood as the person for whom you will be rating the qualities below. Think about his personality and the way he related to you when you were a child, and then rate each item according to the nine point scale below:

	Rating
--gave the feeling in childhood that you were not loved fully or enough	/____/
--the love expressed toward you was inconsistent from one time to another, you were often unsure how you would be reacted to emotionally	/____/
--often communicated in confusing ways, gave mixed messages which were hard to interpret	/____/
--tended to project his own feelings and motivations onto others	/____/
--wanted a close emotional relationship with you	/____/
--concerned with his own adequacy as a person, compared himself to others	/____/
--expressed anger openly and directly	/____/
--was defensive when criticized	/____/

APPENDIX D

Self and Family Data

Please complete each of the following questions, marking the appropriate response on your answer sheet as indicated in the parentheses following each question.

1. Age 17 (mark 0) 18 (mark 1) 19 (mark 2)
 20 (mark 3) 21 (mark 4) 22 (mark 5)
 23 (mark 6) 24 (mark 7) 25 (mark 8)
2. Sex M (0) F (1)
3. Marital Status Single (0) Married (1)
 Separated (2) Divorced (3)
4. Religious identification
 Catholic (0) Jewish (1) Protestant (2)
 Other (3) None (4)
5. Average socioeconomic status of your household during your childhood (from ages 1-12)
 lower (0) lower-middle (1) middle (2)
 upper-middle (3) upper (4)
6. Educational level of father--he completed:
 no schooling (0) elementary school (1)
 junior high school (2) high school (3)
 trade school or community college (4)
 college (5) graduate or professional school (6)
7. Educational level of mother--she completed:
 no schooling (0) elementary school (1)
 junior high school (2) high school (3)
 trade school or community college (4)
 college (5) graduate or professional school (6)
8. Parents' marital status during the majority of your childhood (ages 1-12)
 married (0) divorced (1) separated (2)
9. Number of brothers and sisters
 0 (0) 1 (1) 2 (2) 3 (3) 4 or more (4)
10. Number of intimate sexual relationships you have experienced which lasted one month or longer
 0 (0) 1 (1) 2 (2) 3 (3) 4 (4) 5 (5)
 6 or more (6)

APPENDIX E

Personal Reaction Inventory

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. If you think it is true, record a (0) on your answer sheet; if you think it is false, record a (1).

(0) = true

(1) = false

26. Before voting I thoroughly investigate the qualifications of all the candidates.
27. I never hesitate to go out of my way to help someone in trouble.
28. It is sometimes hard for me to go on with my work if I am not encouraged.
29. I have never intensely disliked anyone.
30. On occasion I have had doubts about my ability to succeed in life.
31. I sometimes feel resentful when I don't get my way.
32. I am always careful about my manner of dress.
33. My table manners at home are as good as when I eat out in a restaurant.
34. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
35. On a few occasions, I have given up doing something because I thought too little of my ability.
36. I like to gossip at times.
37. There have been times when I felt like rebelling against people in authority even though I knew they were right.
38. No matter who I'm talking to, I'm always a good listener.
39. I can remember "playing sick" to get out of something.

40. There have been occasions when I took advantage of someone.
41. I'm always willing to admit it when I make a mistake.
42. I always try to practice what I preach.
43. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
44. I sometimes try to get even, rather than forgive and forget.
45. When I don't know something, I don't at all mind admitting it.
46. I am always courteous, even to people who are disagreeable.
47. At times I have really insisted on having things my own way.
48. There have been occasions when I felt like smashing things.
49. I would never think of letting someone else be punished for my wrongdoings.
50. I never resent being asked to return a favor.
51. I have never been irked when people expressed ideas very different from my own.
52. I never make a long trip without checking the safety of my car.
53. There have been times when I was quite jealous of the good fortune of others.
54. I have almost never felt the urge to tell someone off.
55. I am sometimes irritated by people who ask favors of me.
56. I have never felt that I was punished without cause.
57. I sometimes think when people have a misfortune they only got what they deserved.
58. I have never deliberately said something that hurt someone's feelings.

APPENDIX F

Informed Consent

The study you are about to participate in was designed as part of a research project examining styles of initiating and relating to partners in intimate sexual relationships.

Today's session will take approximately 45 minutes and offer one experimental credit. You will first be asked to again fill out the Relationship Study Questionnaire which you first did when we came to your psychology course. You will then be asked to complete a short questionnaire dealing with some general information about you and your family, then a Personal Reaction Inventory, a questionnaire designed to examine your attitudes toward love, and finally a series of questionnaires concerning various personality characteristics of you and other significant people in your life.

Your participation in this research is not expected to result in any direct benefit to you. Similarly, no negative effects are expected. All information that you complete today will be kept strictly confidential. If you have any further questions concerning the procedures to be used, please feel free to ask the person administering the questionnaires.

Your signature below serves to make it a matter of record that you have been informed of the nature of this research and that you have voluntarily agreed to participate. However, you are free to withdraw consent and discontinue participation at any time during this session.

Thank you for your cooperation.

Date _____

Name (print) _____

Signature _____

APPENDIX G

Debriefing

The study you have just participated in was designed to examine why some people experience particular styles of relating in intimate sexual relationships. The questions concerning your upbringing, attitudes toward love and significant others in your life were posed in order to see if there are any differences between those who experience one style of relating versus another.

Since this study is still in progress, it is important that you do not discuss it with other members of your psychology class, as they may be asked to participate in the future. You may discuss it with others who have already participated, or with anyone after the end of this semester. If you have any further questions or comments now, please feel free to discuss them with the person administering the questionnaires in this session. If any questions arise in the future and/or you would like to discuss this study and its results, contact Michael Sperling in Tobin 503 (phone 545-2130).

Thank you for your participation.

APPENDIX H

Means and Standard Deviations of Item Responses
for the Male Groups on the
Characteristics Qualities Questionnaire

Self Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	7.86	1.13	7.09	1.83	7.26	1.65
(b)	7.55	0.95	6.86	1.88	7.48	0.96
(c)	7.50	1.68	6.50	2.22	5.97	2.40
(d)	7.00	1.58	7.07	1.74	7.52	1.46
(e)	6.30	2.33	4.75	2.42	4.00	2.22
(f)	7.41	1.53	5.45	2.36	5.42	1.89
(g)	5.52	2.43	5.59	2.49	5.74	2.28
(h)	6.09	2.01	5.43	1.77	5.16	2.12

Ideal Self Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	8.34	0.75	7.84	1.55	8.06	1.18
(b)	8.25	0.81	7.41	1.94	7.90	1.51
(c)	7.43	1.65	6.14	2.57	6.35	2.24
(d)	8.11	1.22	8.64	0.61	8.39	0.76
(e)	4.91	2.40	4.07	2.39	3.16	1.98
(f)	6.48	2.09	5.27	2.35	5.06	2.02
(g)	5.41	2.20	5.53	2.31	5.87	2.14
(h)	4.20	2.26	3.91	2.06	3.81	2.14

Partner Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	7.64	1.62	7.04	1.96	7.48	1.75
(b)	7.68	1.20	7.55	1.49	7.71	1.01
(c)	7.28	1.45	5.98	2.25	6.19	1.68
(d)	6.36	2.07	5.80	2.12	6.00	1.73
(e)	5.50	2.41	4.57	2.33	4.26	2.18
(f)	7.18	1.88	6.80	1.86	6.68	1.97
(g)	5.64	2.39	5.34	2.16	5.29	2.24
(h)	5.36	2.32	5.02	2.03	5.26	1.84

Ideal Partner Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	8.23	1.08	7.70	1.79	8.19	1.08
(b)	8.05	1.31	7.66	1.83	8.22	0.92
(c)	7.55	1.34	6.11	2.35	6.30	2.07
(d)	7.98	0.95	8.00	1.06	8.00	1.21
(e)	5.25	2.36	4.41	2.22	3.45	2.19
(f)	7.55	1.07	6.14	2.13	5.55	1.91
(g)	5.61	2.10	5.78	2.03	6.00	1.88
(h)	4.07	2.04	4.05	1.92	4.26	1.81

Mother Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(i)	1.80	1.46	2.02	1.21	2.06	1.73
(j)	2.25	1.89	2.32	1.47	2.55	1.89
(k)	2.34	1.75	2.57	1.56	2.71	2.08
(l)	4.98	2.54	4.89	2.29	4.94	2.39
(m)	7.18	2.26	6.57	2.05	5.77	2.17
(n)	4.86	2.85	4.89	2.12	3.58	2.36
(o)	5.84	2.37	5.86	2.22	6.13	2.08
(p)	5.00	2.61	5.09	2.15	5.58	2.42

Father Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(i)	2.18	1.56	2.48	1.70	2.19	1.38
(j)	2.59	1.92	2.98	2.02	2.71	1.79
(k)	2.82	2.08	3.27	1.99	3.06	2.16
(l)	5.25	2.43	5.41	2.50	4.81	2.26
(m)	5.91	2.28	6.18	2.03	4.97	2.43
(n)	3.23	2.29	3.91	2.67	2.97	2.02
(o)	6.02	2.27	6.43	2.14	6.19	2.27
(p)	4.95	2.19	5.82	2.32	5.19	2.52

APPENDIX I

Means and Standard Deviations of Item Responses
for the Female Groups on the
Characteristics Qualities Questionnaire

Self Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	8.34	1.24	7.23	1.58	6.50	1.90
(b)	7.91	1.12	7.20	1.09	7.20	1.50
(c)	7.30	1.75	7.09	1.60	6.02	2.18
(d)	6.30	1.84	6.82	1.51	7.07	1.26
(e)	6.00	2.34	5.66	1.98	4.30	2.04
(f)	7.93	1.65	7.30	1.42	5.89	2.24
(g)	5.86	2.36	5.41	2.24	5.61	2.35
(h)	5.80	2.26	5.48	1.77	5.25	1.81

Ideal Self Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	8.43	1.04	8.34	0.81	7.66	1.55
(b)	8.39	1.26	8.39	0.72	7.96	1.16
(c)	7.34	1.40	6.59	1.74	5.84	1.87
(d)	8.32	1.14	8.41	0.73	8.25	0.89
(e)	4.14	2.51	4.09	2.21	3.61	1.92
(f)	6.95	1.88	6.45	1.80	5.61	1.90
(g)	6.30	1.92	6.16	1.89	5.93	2.16
(h)	4.02	2.30	3.36	1.92	3.80	2.10

Partner Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	7.98	1.36	6.89	1.66	6.95	1.80
(b)	7.89	1.66	7.48	1.25	7.23	1.60
(c)	7.00	1.94	6.14	1.88	5.86	2.02
(d)	6.75	1.84	7.05	1.74	6.39	2.06
(e)	5.41	2.49	5.09	1.84	4.91	2.36
(f)	7.11	1.85	6.05	2.21	5.82	2.46
(g)	5.80	2.39	5.41	2.35	5.43	2.39
(h)	5.32	2.20	5.39	2.07	5.36	2.28

Ideal Partner Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(a)	8.64	0.61	8.41	0.69	7.84	1.41
(b)	8.52	1.05	8.25	0.81	7.80	1.19
(c)	7.30	1.47	6.70	1.53	5.59	1.96
(d)	8.23	1.03	8.27	0.79	8.09	0.71
(e)	4.44	2.31	3.86	1.96	3.52	1.95
(f)	7.36	1.43	6.84	1.40	5.77	1.98
(g)	6.32	1.75	5.98	1.85	5.98	1.75
(h)	4.00	2.07	3.39	1.51	3.64	2.02

Mother Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(i)	1.95	1.58	2.36	2.05	1.93	1.50
(j)	2.55	2.15	2.86	2.62	2.25	1.89
(k)	2.67	2.08	2.89	2.35	2.39	1.86
(l)	4.89	2.51	5.25	2.17	4.68	2.26
(m)	7.11	2.33	6.55	2.18	6.93	2.10
(n)	4.02	2.42	4.11	2.34	3.93	2.41
(o)	6.43	1.87	5.91	2.11	5.86	2.50
(p)	5.66	2.25	5.43	2.17	4.61	2.23

Father Scale						
Item	Desperate Love		Random		Non-Desperate Love	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
(i)	3.09	2.67	2.16	1.57	2.30	1.90
(j)	3.59	2.91	3.09	2.42	2.66	2.00
(k)	3.66	2.68	3.68	2.48	3.18	2.41
(l)	4.93	2.68	4.93	2.39	5.64	2.30
(m)	5.50	2.60	6.05	2.17	6.00	2.10
(n)	3.18	2.42	3.61	2.63	3.36	2.52
(o)	6.73	2.40	6.00	2.32	6.36	2.35
(p)	5.34	2.63	5.09	2.31	4.84	2.56

t-values and 2-tail Probabilities for Male Group Comparisons on Items from
the Characteristic Qualities Questionnaire

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APPENDIX J (continued)

		<u>Group Comparison</u>					
		<u>Desperate love--Random</u>		<u>Desperate love--Non-desperate love</u>		<u>Random--Non-desperate love</u>	
		<u>df</u>	<u>t-value</u>	<u>df</u>	<u>t-value</u>	<u>df</u>	<u>t-value</u>
Partner scale							
(c) (e)		86	2.99**	73	2.72**	73	-0.45
		86	1.85	73	2.29*	73	0.58
Ideal partner scale							
(c) (e) (f)		86	3.51**	73	3.15**	73	-0.35
		86	1.72	73	3.34**	73	1.85
		86	3.92**	73	5.78**	73	1.23
Mother scale							
(m) (n)		86	1.33	73	2.70**	73	1.61
		86	-0.04	73	2.06*	73	2.51*

Note. The items above are those for which significant group differences were indicated using analysis of variance.

*p < .05

**p < .01

APPENDIX K

t-values and 2-tail Probabilities for Female Group Comparisons on Items
from the Characteristic Qualities Questionnaire

		<u>Group Comparison</u>			
		<u>Desperate love--Random</u>		<u>Desperate love--Non-desperate love</u>	
		<u>df</u>	<u>t-value</u>	<u>df</u>	<u>t-value</u>
				<u>Random--Non-desperate love</u>	
		<u>df</u>	<u>t-value</u>	<u>df</u>	<u>t-value</u>
Self scale					
(a)		86	3.68**	86	5.39**
(b)		86	2.99**	86	2.50*
(c)		86	0.57	86	3.02**
(e)		86	0.74	86	3.64**
(f)		86	1.94	86	4.87**
Ideal self scale					
(a)		86	0.46	86	2.74**
(c)		86	2.23*	86	4.27**
(f)		86	1.28	86	3.33**
				86	2.58*
				86	1.95
				86	2.14*

APPENDIX K (continued)

		<u>Group Comparison</u>			
		<u>Desperate love--Random</u>		<u>Desperate love--Non-desperate love</u>	
		<u>df</u>	<u>t-value</u>	<u>df</u>	<u>t-value</u>
<u>Partner scale</u>					
(a)	86	3.38**	86	3.01**	86
(c)	86	2.12*	86	2.69**	86
(f)	86	2.46*	86	2.79**	86
<u>Ideal partner scale</u>					
(a)	86	1.63	86	3.42**	86
(b)	86	1.37	86	3.04**	86
(c)	86	1.84	86	4.62**	86
(f)	86	1.73	86	4.33**	86

Note. The items above are those for which significant group differences were indicated using analysis of variance.

*p < .05
 **p < .01