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THE SOCIAL PSYCHOLOGY OF ROMANTIC LOVE

by
Isaac Michael Rubin

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Professor Theodore M. Newcomb, Chairman
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ABSTRACT

THE SOCIAL PSYCHOLOGY OF ROMANTIC LOVE

by

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Love is commonly regarded to be the deepest and most meaningful of sentiments. In Western culture, moreover, the association between love and marriage gives it a unique status as a link between the individual and the structure of society. It is surprising to discover, therefore, that love has no independent status as a social-psychological concept. This research set out to fill that gap. It was based on the assumption that love is a type of attitude held by a person toward a particular other person, and the approach taken was one of construct validation. According to this strategy, the attempts to define love, to measure it, and to assess its relationships with other variables were seen as parts of a single endeavor. The focus of this attempt was "romantic" love -- i.e., love between young adult opposite-sex peers, of the sort which could possibly lead to marriage.

The investigation had three major phases. First, a paper-and-pencil love scale was developed. Second, the scale was administered together with other measures to 182 college student dating couples. Third, predictions based on the emerging conception of love were tested in a laboratory experiment.

The development of a love scale began with the construction of a pool of items, as suggested by various psychological and sociological speculations about the nature of romantic love. Items intended to tap the more extensively researched "garden variety" of interpersonal attraction, "liking," were also included. After preliminary sortings by panels of judges, a set of 70 items was administered to several hundred college students, who completed them with

respect to their attitudes toward their girlfriends or boyfriends. Primarily on the basis of factor analysis of these responses, 13-item scales of love and liking were built. Each of the scales was internally consistent, but the two were only moderately intercorrelated. The content of the love scale served as a working definition of love for the succeeding phases of the research. It included three major components:

1. Affiliative and dependent need -- e.g., "If I could never be with ____ [my girlfriend or boyfriend], I would feel miserable."
2. Predisposition to help -- e.g., "If ____ were feeling badly, my first duty would be to cheer him (her) up."
3. Exclusiveness and absorption -- e.g., "When I am with ____, I spend a good deal of time just looking at him (her)."

The notion that lovers are highly absorbed in one another led to the prediction that couples in which the two partners love each other a great deal, as assessed by the scale, would spend more time gazing into one another's eyes than would couples who love each other relatively little. This prediction was confirmed in the experiment. Other predictions relating love to time perception and helping behavior were not confirmed, however.

The findings of the questionnaire study included the following:

--Love and liking for one's dating partner were more highly interrelated among men ($r=.60$) than among women ($r=.39$). In addition, although the mean love scores of women and men were almost identical, women tended to like their boyfriends more than their boyfriends liked them.

--For both sexes, love (but not liking) was highly related to the respondents' estimates of the likelihood that they would marry their partners ($r=.59$). Women's estimates of this likelihood tended to be higher than men's.

--Members of couples who had been dating less than 18 months tended to love their partners more if the two were of different religions (N=61 couples) than if they were of the same religion (N=100 couples). But among those who had been dating 18 months or more, the difference was in the opposite direction.

As predicted, initial love scores were positively related to respondents' reports on a followup questionnaire six months later that their relationships had made progress toward permanence.

It was concluded that the investigation represents a useful first step in the social-psychological study of romantic love. High-priority directions for future research include additional laboratory and field experiments on the behavioral manifestations of love, the investigation of the relationships between love and sexual behavior, and the revision of the love scale.

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A large number of people contributed to this dissertation. Although my thanks to each of them will be brief, they are nevertheless heartfelt.

The chairman of my doctoral committee was Theodore Newcomb. Dr. Newcomb, as all of his former students know, is an exceptionally skilled editor, with the ability to tell you exactly what you meant to say but didn't know how to. I owe an intellectual debt to Dr. Newcomb, because it was as a result of taking a course with him in my first year as a graduate student that I became interested in the study of interpersonal attraction. I owe him an even greater personal debt. It was to a large extent as a result of his encouragement and his support that I was able not only to carry out this research but also to enjoy doing it. Through his warmth as well as his wisdom Dr. Newcomb created an environment in which independent research could flourish.

The members of my doctoral committee, William Gamson, Warren Norman, Joseph Veroff, and Robert Zajonc, all made contributions to the planning of the research and helped to improve the manuscript. I am grateful to all of them. In addition, it was in Dr. Norman's course that I learned about "construct validation," which is what this research tries to do. Useful comments and suggestions were also provided by John Forward and James House.

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CHAPTER I

INTRODUCTION

If social psychology is to bear any reasonable correspondence to the reality of interpersonal relations, one of its central concerns must clearly be love. Love is generally regarded to be the deepest and most meaningful of sentiments. It has occupied a pre-eminent position in the art and literature of every age, and it is presumably experienced, at least occasionally, by the vast majority of people. In Western culture, moreover, the association of love with marriage gives it a unique status as a link between individual and society.

In view of these considerations, it is surprising to discover that love has no independent status as a social-psychological concept. In general, psychologists have been content to leave love to the priests and the poets. There are branches of the social sciences which have made tangential contact with love, including psychoanalytic theory, the sociology of courtship and marriage, the psychology and sociology of sexual behavior, and the social psychology of interpersonal attraction. It is the last of these traditions which seems to offer the most promising entrée to the social psychology of love. But students of interpersonal attraction have not attempted to conceptualize love as an independent entity. For Heider (1958), for example, "loving" is merely intense liking--there is no discussion of possible qualitative difference between the two. Newcomb (1960) does not include love on his list of the "varieties of interpersonal

attraction." In tests of the "similarity-attraction hypothesis," pairs of friends and pairs of spouses are treated more or less interchangeably (e.g., Levinger & Breedlove, 1966). And even in experiments directed specifically at heterosexual attraction (e.g., Walster, 1965), the dependent measure is simply a verbal report of "liking."

The present research is predicated on the assumption that love may be (and must be) independently conceptualized and measured. I propose to take a construct-validated approach to love (cf., Cronbach & Meehl, 1954). According to this strategy, the attempts to conceptualize love, to measure it, and to assess its relationship to other variables are all seen as integral parts of a single endeavor. It is only through the process of measuring love and relating it to other variables that a meaningful and useful conceptual definition will emerge. An initial assumption in this enterprise is that love is an attitude held by a person toward a particular other person, involving predispositions to think, feel, and behave in certain ways toward that other person. This assumption places love in the mainstream of social-psychological approaches to interpersonal attraction, alongside such other varieties of attraction as liking, admiration, and respect. (cf., Newcomb, 1960). This view of love as a multi-faceted attitude implies a broader perspective than that held by theorists who have defined love as an "emotion," a "need," or a set of behaviors. On the other hand, its linkage to a particular target implies a more restricted view than that held by theorists who regard love as an aspect of the individual's personality or experience which transcends particular persons and situations. In fact, only one class of potential objects of love will be relevant in this research. These

targets are the opposite-sex peers of unmarried persons who participate in "dating" or "romantic" relationships.

The Varieties of Love

In an insightful essay, Orlinsky (in press) maintains that relationships commonly regarded as involving love are distributed regularly over the individual life cycle--the asymmetrical relationships between children and their parents and the symmetrical relationships between pre-adolescent "chums," adolescent and young adult "lovers," and adult spouses. According to Orlinsky, this patterning is not accidental. Rather, love relationships are seen as playing an indispensable part in the process of personal growth. This process involves the "progressive differentiation and integration of a person's basic images of himself and others, and of his basic capacities for relating to himself and others." Orlinsky proposes that the "differentiation" aspect of growth is mediated by the interpersonal processes of contest, conflict, and dominance, while the "integration" (or "communion") aspect of growth is mediated by the interpersonal process of love. In terms of this developmental scheme, "the form of love which is closest to one's 'growing edge' at any given time in his life is the form that is most absorbing and exciting to him."

Orlinsky puts forth a general theory of love relationships as a form of interpersonal exchange. He postulates that the individual's "growth need" engenders a "sense of attraction" toward someone who is seen as potentially fulfilling this need. This sense of attraction is followed by responses which are aimed at engaging the target in an intimate relationship. If the other person does in fact satisfy the individual's growth need, the result is a "pleasurable sense of

fulfillment," as well as a "feeling of tenderness" based on gratitude to the other person. There is, then, a dual feeling-impulse shaping one's response in a love relationship--a sense of desire or attraction (which Orlinsky compares to the "sensual" current of the libido in Freud's terminology) and a sense of tenderness or concern (which he likens to the "affectionate" component of the libido).

Neither Orlinsky's view of love as mediating personal growth nor his exchange theory analysis of the love relationship is central to the present research. What is most important about Orlinsky's approach, for present purposes, is that it provides a rationale both for the commonality and for the distinctiveness of different socially patterned love relationships. Orlinsky believes that language is not entirely capricious in its use of the same word, "love," to describe such apparently diverse relationships as those between parents and children, between "lovers," and between spouses. He goes so far as to suggest that the usage may be theoretically appropriate for describing people's orientations toward certain impersonal objects as well, such as God, country, pets, places, and activities. (Such orientations, he feels, are often initially based in personal relationships, and then transferred to the impersonal objects.) This defense of the psychological fidelity of everyday language is cogent as well as reassuring. At the same time, however, Orlinsky stresses that the nature of the love experience depends on the specific developmental stage and type of role relationship in question. Thus the "romantic passion" which he identifies as the love experience of young "lovers" is qualitatively different from the "symbiotic acceptance" of the infant, the "intimacy" of pre-adolescent chums, and the "mutuality" of spouses. "Unless we intend

to compare the common features of these different modes of love," Orlinsky writes, "we ought to train ourselves to state explicitly the specific type of involvement to which we have reference. What is true of romantic love is not necessarily true of conjugal love, much less of parental love."

In this research, I have followed Orlinsky's suggestion. No attempt will be made to compare the features of different modes of love. Instead we will concentrate on romantic love, which may be defined simply as love which exists between unmarried opposite-sex partners, of the sort which could possibly lead to marriage. In moving toward a concept of romantic love I will feel free to make use of the theoretical literature about "love in general," and if the results of this research prove to be generalizable to other forms of love as well, so much the better. It should be clear, nevertheless, that henceforth the word "love" will be used to refer only to the romantic relationship, and, more specifically, to an attitude held by young people toward particular opposite-sex peers.

The Task at Hand

There are lots of "good quotes" on the nature of love, which I will be sprinkling lightly over these pages. There is also an abundance of speculations, ruminations, and theories, propounded by everyone who is anyone in contexts ranging from Plato's Symposium to Portnoy's Complaint. There is, unfortunately, little "hard data" bearing upon so tender a topic. We set forth upon our quest for a concept of romantic love, therefore, armed only with three assumptions and, hopefully, an open mind. The first assumption, which has already been stated, is that love is an interpersonal attitude. The second assumption is that love is not an

all-or-none affair, but rather a quantifiable entity which can vary in strength across persons and situations. The third assumption is that love is unidimensional. Although it may include several attitudinal components, these components are, in fact, highly intercorrelated. The practical corollary of these assumptions is that love, like attitudes toward the United Nations or toward the church, can in principle be measured by means of a Likert-type scale. The open mind comes into the picture in connection with the vast terrain which remains uncharted: the specification of the components of the loving attitude.

The nature of the present research can be more clearly understood if we consider, in contrast, the ostensibly similar investigation undertaken by Swensen (1960; Swensen & Gilner, 1964). Swensen, who was interested in describing the "behavior of love," began by asking 300 college students to list all the behaviors, utterances, and feelings which they thought differentiated their relationships with loved ones from their relationships with mere acquaintances. From these responses he derived a 383-item check-list, which 598 subjects then completed with respect to each of five target persons: father, mother, closest sibling, closest same-sex friend, and closest opposite-sex friend (or spouse). To insure that these responses were, in fact, relevant to "love," Swensen instructed his respondents not to complete the scale if they did not feel that they loved the person in a particular relationship. Factor analysis of these responses yielded six major categories of "loving behaviors": verbal expression of feelings, self-disclosure, non-material evidence of love (e.g., concern and encouragement), non-expressed feelings, material evidence of love, and "willingness to tolerate the less pleasant aspects of the loved person." Swensen's subsequent conclusions were based on

comparison of the factor scores for the various types of relationship. Some of these results are suggestive, and will be referred to at later points. (Others seem rather trivial. For example: "For college students the chief expression of love with the father was money, with the direction of flow being from the father to the student.")

More basically, however, Swensen's research ignores what for me is the crucial issue. This is the specification of the thoughts, feelings, and behavioral predispositions which constitute love. Such specification, unlike Swensen's results, would make it possible to investigate the antecedents and consequences of varying degrees of love in particular relationships. And, in accord with the strategy (or, perhaps, philosophy) of construct validation, it is in large measure by means of the empirical investigation of antecedents and consequences that a meaningful conceptual definition will emerge. The first step in this process will be the development of an internally consistent and intuitively reasonable paper-and-pencil love scale. An attempt will be made, moreover, to construct this scale in such a way that it is empirically distinct from a parallel scale of "liking." This endeavor will be described in Chapter 2. Once a working love scale has been developed, the relationships between "love" (here put in quotes because we will not yet be sure about it) and potentially relevant antecedents and consequences will be explored by means of questionnaire data (Chapters 3 and 4), and its predictive utility will be assessed by means of a laboratory experiment (Chapter 5). In addition, the ability of the love scale to predict the progress of courtship will be assessed by means of a followup

survey (Chapter 6). After these data have been collected and digested, we will (in Chapter 7) be able to circle back and offer our best, properly qualified answer to the question that has been asked repeatedly through the ages: "What is love?" For Swensen it is "a positive, enjoyable, constructive interpersonal relationship." Perhaps our own answer will be more specific.

It is also hoped that the research will yield some secondary gains. Just as Jason harnessed fire-breathing bulls and sowed dragons' teeth on his way to the Golden Fleece, the present investigator aspires to gather information about such phenomena as the social context of college dating and visual behavior in heterosexual dyads on his way to the mysteries of love. This is, of course, a hedge. If the researcher fails to reach the fleece, he can at least point to the fire-breathing bulls.

Conceptual Beginnings

Since I have chosen to view love as an interpersonal attitude, it must be considered in relation to the more extensively researched garden variety of interpersonal attraction, which generally goes by the name of "liking." Social psychologists have typically conceived of liking in very general terms, as an undifferentiatedly positive attitude toward some person. In fact, the terms "liking" and "attraction" are most often used interchangeably. Liking is identified by generally favorable perceptions of the target person, pleasant feelings about him, and, less integrally bound to the concept, by a desire to affiliate with him in a variety of contexts. In accordance with this broad conception, liking is usually measured either by asking the subject to indicate

"How much do you like _____?" or by summing his ratings of the target person on an arbitrarily selected set of bipolar adjective scales. A somewhat less common measurement technique involves asking the subject to select a particular person from a pool of potential roommates, classmates, or activity partners. (For a recent review of conceptual and sociometric approaches to liking, see Lindzey and Byrne, 1968,) In contrast to this undifferentiated conception of liking, the content of the cognitive, emotional, and behavioral components of a loving attitude must be delineated more specifically. The remainder of this chapter will point the way toward such a delineation by presenting a sampling of the thoughts that psychologists, sociologists, and other men of good will have expressed about love. This highly eclectic review will serve as a starting point in the endeavor to build a working love scale.

Cognitive Component: Idealization. In the perceptual-cognitive domain, love has been seen as characterized by a peculiar idealization of the object. Such idealization, which presumably involves some degree of perceptual distortion, might be expected to be most extreme with respect to certain culturally emphasized attributes such as beauty, kindness, and sincerity. As Shakespeare put it, "Love is blind, and lovers cannot see the pretty follies that themselves commit." Or, in Nietzsche's words, "Love is the state in which man sees things most widely different from what they are." Freud (1910) points to a similar conclusion when he states that "narcissistic" love involves replacing one's ego ideal with the loved one. Another aspect of idealization, which stands midway between the cognitive and the behavioral components of love, is the lover's willingness to forgive the loved one for any infractions which he might commit. Even if lovers are able to see each

others' "pretty follies," they may be inclined to excuse them. This tendency also corresponds to Swensen's factor of "willingness to tolerate the less pleasant aspects of the loved person."

Emotional Component: Passion, Affection, and Sensuality. In the domain of emotion, love is not adequately characterized by "generally pleasant feelings." There are more specific feeling elements associated with love, including warmth, tenderness, jealousy, and passion. The passionate element of romantic love deserves special attention. As the word implies, and as the "romantic ideal" dictates (see, for example, de Rougemont's [1940] Love in the Western World), love may include admixtures of suffering and inner turmoil. To an extent, it may even be seen as irrational and uncontrollable. In addition, love is sometimes linked to vicarious emotion. Lovers are seen as experiencing each others' pains and pleasures to an unusually large extent. Some of the above intuitions are supported by data made available to me by Robert Wolosin. Wolosin asked 30 college students to rate twelve types of love relationships, including "actual romantic love" and "ideal romantic love," on 30 bipolar adjective scales. Actual romantic love received its most extreme ratings as pleasurable, passionate, tender, reassuring, kind, and hot. Although the ratings given to the two types of romantic love were in reasonably close accord, ideal romantic love was regarded as considerably more liberating, constant, sharing, and certain than its actual counterpart.

Wolosin (1966) has also obtained quantitative support for a two-factor conception of the emotional component of love. After summing the semantic profiles across all types of love, he extracted two major factors which were interpreted as "Interpersonal Joy" (e.g., kind, deep, tender,

and sharing) and "Sex" (e.g., passionate, hot, fast, and sharp). These descriptions correspond neatly to the dual feeling-impulse postulated by Orlinsky in his exchange theory analysis of the love relationship. As previously noted, Freud (1910) presents a similar dichotomy in his discussion of the "affectionate" and "sensual" currents of the libido. A closely related conception was set forth by Goode (1959) in his social-structural analysis of romantic love. He defined love as a "universal psychological potential," recognizable as an emotional attachment with components of "sex desire" and "tenderness."

Behavioral Component: Sharing and Serving. As in the case of liking, love presumably implies the predisposition to affiliate with the loved one. There may be exceptions to this principle, however. In some instances, people may prefer to be separated from their lovers so that their idealizations will not be threatened. (For a case in point, see de Rougemont's analysis of the myth of Tristan and Isolde.) More distinctively, in my view, love involves the tendencies to share with and to serve the loved one. Such tendencies emerged in Swensen's factor analysis of the "behavior of love," under the headings of material and non-material evidence of love, and the factor scores for romantic love were higher for non-material (e.g., advice, concern, and encouragement) than for material evidence. Although "sharing" seems to imply equality between lovers, "serving" points to an asymmetrical relationship. Oliver Goldsmith emphasized the latter when he wrote, "Friendship is disinterested commerce between equals; love, an abject intercourse between tyrants and slaves." This viewpoint suggests that loving may be less reciprocal than liking. On the other hand, the possibility that each lover may be both tyrant and slave seems to be in closer accord with popular conceptions.

Each lover subordinates his own desires and goals to those of the other, even as he becomes dependent on the other for the fulfillment of these desires and goals.

A more specific behavioral predisposition associated with love in modern Western society is, of course, the tendency to marry (and, in earlier stages, to "go with" and to become engaged). This commonly recognized tendency may provide a criterion of sorts for measures of love.

Exclusiveness and Absorption. Perhaps the most fundamental aspect of love, which is relevant to all three attitudinal components, is its exclusiveness. It is generally assumed that one can love (in the romantic sense) only one person at a time. This proposition may be in part a consequence of the constraints of a monogamous society. But it may also reflect the intrinsic nature of the love relationship. As lovers become dependent on one another for the fulfillment of their individual goals, they are also seen as focusing their interpersonal interests and capacities upon one another. This concentration represents an emotional investment which may preclude the simultaneous establishment of similar relationships with others. In addition, it may lead to feelings of jealousy when the loved one associates with (or is suspected of associating with) others.

The exclusive aspect of love may well be minimized by societal forces. Slater (1963) argues that "An intimate dyadic relationship always threatens to short-circuit the libidinal network of the community and drain off some of its sustenance." Society protects itself, Slater maintains, by institutionalizing courtship, marriage, and even love itself. The social and religious context in which weddings take place

and the popularity of "honeymoon havens" are two examples of such mechanisms. The operation of such routinizing mechanisms may be seen as reducing the practical importance of the exclusive aspect of love. It seems more persuasive, however, to argue that they have precisely the opposite effect. I am inclined to think that the strength of a couple's love is related to the degree to which they do engage in what Slater has termed "dyadic withdrawal" from society, in spite of opposing pressures. This notion may facilitate the conceptual distinction between what is loving and what is socially desirable. The more two people love each other, the less their behavior toward one another may be influenced by general or sex-specific cultural norms, or even by norms which refer specifically to people who are "in love."

The assumption that love is characteristically exclusive may also help to distinguish it from liking. This distinction may be approached from a perceptual standpoint. The information that A likes B tends to increase an observer's estimate of the likelihood that A likes C as well (for evidence on this point see Rubin and Zajonc, in press). It means, after all, that A is a friendly person. The information that A loves B, on the other hand, greatly decreases the subjective probability that A loves C. Similarly, the information that A is liked by B suggests that A is "likable," and is probably liked by C as well. But the information that A is loved by B does not imply that A is generally lovable, and it reduces the probability that A is loved by C.

Frommian Love. For Erich Fromm (1956), exclusiveness is the characteristic which distinguishes romantic love (in his terms, "erotic love") from all other forms of love. Unfortunately, he hedges this distinction

to the point of obscurity. His general view is that love is an "orientation of character which determines the relatedness of a person toward the world as a whole." In other words, love is a trait rather than an attitude. In order to keep his conception of erotic love in accord with this general view, Fromm is forced to make somewhat vacillatory statements:

Erotic love is exclusive, but it loves in the other person all of mankind, all that is alive. It is exclusive only in the sense that I can fuse myself fully and intensely with one person only. Erotic love excludes the love for others only in the sense of erotic fusion, full commitment in all aspects of life--but not in the sense of deep brotherly love. (Fromm, 1956, p. 46 in Bantam edition)

In spite of the fact that Fromm's view of love as a personality trait is fundamentally different from the attitudinal conception adopted in the present research, The Art of Loving is a rich source of insights into the nature of love. Fromm identifies four basic elements as common to all forms of love:

1. Care. "Love is the active concern for the life and growth of that which we love."

2. Responsibility. "To be 'responsible' means to be able and ready to respond....This responsibility, in the case of the mother and her infant, refers mainly to physical needs. In the love between adults, it refers mainly to the psychic needs of the other person."

3. Respect. "It denotes, in accordance with the root of the word (respicere=to look at), the ability to see a person as he is, to be aware of his unique individuality."

4. Knowledge. "To respect a person is not possible without knowing him; care and responsibility would be blind if they were not guided by knowledge."

Care and responsibility have already been alluded to in connection with the tender feelings and the tendencies to share and to serve associated with love. Fromm's equation of respect with accurate interpersonal perception, as well as his emphasis on knowledge, must be

reconciled with the notion advanced earlier that lovers tend to misperceive one another. It may be, for example, that blindness is characteristic of love only with respect to relatively superficial characteristics. Although Dr. Fromm would probably wince at the thought, this is one of the many propositions about love which may be susceptible to empirical test.

The Romantic Ideal

The central role of love in Western patterns of courtship and marriage has been deplored by many writers. According to de Rougemont (1959), for example, "The type of love on which a great majority of modern Western marriages is founded is a fever, generally light and considered infinitely interesting to contract" (p. 451). After contrasting what he considers to be the basic requisites of love and of marriage, de Rougemont concludes: "We are now in the act of trying out-- and failing miserably at it--one of the most pathological experiments that a civilized society has ever imagined, namely, the basing of marriage, which is lasting, upon romance, which is a passing fancy" (p. 452). The psychoanalyst Kubie unleashes a similar attack on the predication of marriage upon love:

It is obvious that the state of being in love is no guide. It is an obsessional state which, like all obsessions, is in part driven by unconscious anger. The transition from that strongly ambivalent obsession which we call "being in love" to the capacity to really love another human being is one of the most important and difficult and intricate phenomena of human life. (Kubie, 1956, p. 31)

It must be emphasized that these writers' conception of love (or, for Kubie, "being in love") diverges widely from most of our other conceptual starting points. Their reference is to a variety of love which

has its roots in the courtly love of 12th-century France and which was later resurrected in the early 19th century. This "romantic ideal," which until the late 19th century was virtually always restricted to extramarital (as opposed to premarital or marital) relationships, views love as sacred, predestined, irrational, and as vacillating between extreme joy and exquisite suffering. A distinguishing feature of this ideal, as interpreted by de Rougemont (1940) is that it is the experience of love itself, rather than the love object, which is valued by the lover. It is for this reason that de Rougemont sees the ideal as dictating the frequent separation of lovers: "Their need of one another is in order to be aflame, and they do not need one another as they are. What they need is not one another's presence, but one another's absence" (de Rougemont, 1940, p. 43 in Fawcett paperback edition).

There is no doubt that, aided by the mass media, elements of the romantic ideal have pervaded all strata of modern American society. A popular genre of comic books, magazines, radio and television serials, novels, and movies is inhabited by heroines who "do not know of any attraction to a man except overwhelming, unconquerable, unerotic, and absolutely unselfish love that strikes at first sight, breaks down all bars of class or education, unfailingly cures all moral defects and inevitably solves all possible problems when transposed into marriage" (Beigel, 1951, p. 332). A recent example is the movie "Guess Who's Coming to Dinner," in which an insipid, rich, white girl and a brilliant, selfless, Negro physician meet in Hawaii, fall in love at first sight, and in the subsequent week manage to break down their parents' opposition, get married, and fly off to a lifetime of bliss in the doctor's jungle hospital.

In spite of its visibility in popular culture, however, there is evidence that the romantic ideal does not in fact provide a good characterization of the relationships among dating couples. In their study of 1,000 engaged couples, for example, Burgess and Wallin (1953) found that virtually none of them felt they had fallen in love at first sight. There is some evidence that boyfriends and girlfriends are "idealized" in the early stages of courtship, but evaluations typically become more realistic as the relationship progresses (Kerckhoff & Davis, 1962). Young people tend to describe their courtships so "realistically," in fact, that some writers have expressed doubt that love is involved at all. After interviewing 20 newlywed couples in the Washington area, one disappointed group of researchers came to the following conclusion:

The period of courtship is renowned in song and story. It is reputedly glamorous, colorful, and exciting. These platitudes help express the discrepancy between our expectations and our findings. We expected description of emotional excitement and found flatness. We expected to learn of deliberation and reflection, alternating perhaps with impulsivity. What was described was drifting. The experience of listening was like watching an automated production line, with life proceeding at a regulated pace. Such things as dating, going steady, engagement, and marriage seemed to be imposed from the outside, with our subjects caught in the system.

In this research I hope to steer a middle course between two extremes. On the one hand, it should be clear that the focus on "romantic" love does not imply any allegiance to the romantic ideal. On the other hand, the possibility remains open that certain elements of the ideal, such as feelings of jealousy and the tendency to idealize the loved one, might profitably be included in the concept of love. In addition, the question of the relationship between a person's degree of "romanticism" (i.e., the degree to which he believes that love is predestined, overwhelming, and

everlasting) and his love for a particular partner will be approached empirically. In line with some previous research (e.g., Gross, 1944; Hobart, 1958; Knox & Sporakowski, 1968), respondents' attitudes toward love on a dimension ranging from "romantic" to "adaptive" will be independently assessed. These attitudes will be related to their attitudes toward their boyfriends and girlfriends, as measured by the love scale. Further discussion of the romantic ideal, therefore, will be found in Chapter 4, in connection with data on the social context of love.

A Request

"Voi, che sapete, che cosa è amor?" ("Tell me, you who know, what is this thing, love?")--Cherubino, in Mozart's Marriage of Figaro.

A Challenge

"Who can explain it, who can tell you why? Fools give you reasons, wise men never try"--Oscar Hammerstein II, South Pacific.

CHAPTER II
DEVELOPING A LOVE SCALE

The Item Pool

The attempt to develop a paper-and-pencil measure of romantic love began with the construction of a large pool of questionnaire items referring to the respondent's thoughts, feelings, and behavioral predispositions toward some particular other person (the "target person"). Half of the items were intended to reflect "liking" and half to reflect "love." The nature of the liking items was dictated to some extent by the existing theoretical and empirical literature on interpersonal attraction. They included questions about the desire to affiliate with the target in various contexts, evaluation of the target on several dimensions, the salience of norms of responsibility and equity, feelings of respect and trust, and the perception that the target is similar to oneself. The love items were suggested by a wide variety of sources and intuitions, as outlined in Chapter 1. Specifically, the questions referred to physical attraction, idealization, a predisposition to serve, the desire to share emotions and experiences, feelings of exclusiveness and absorption, felt affiliative and dependent needs, the holding of contradictory feelings, and the relative unimportance of universalistic norms.

In order to assess the face validity of the initial categorization of items, two successive ten-member panels of student and faculty judges

were asked to sort cards with the items typed upon them into equal-sized liking and love piles. Panel A sorted 80 items, and after some revisions and deletions were made Panel B sorted a pool of 70 items. In each case the judges were told that the items would be administered to college students, who would respond to them with respect to their boyfriends and girlfriends. Given this information, the judges were asked to rely on their own linguistic understandings and intuitions in deciding which of the items reflected liking and which reflected love. Using the judges' opinions as advisory, a revised set of 70 items to be administered to a student sample was assembled. These items, as classified conceptually by the author and together with a summary of the judges' opinions, are presented in Table 1. There was, on the whole, a fairly large degree of consensus. Although the judges' word was not taken as law, the majority of judges supported the final categorization of an item as liking or love in 55 of 66 cases. (Four of the items on the questionnaire were not previously judged.) At least 70 percent of the judges agreed with the assignment in 37 of the 66 cases. It should be noted that in several cases the original categorization of an item was shifted as a result of the judges' verdict. For example, "How much do you trust _____?", originally constructed as a liking item under the heading of "Respect and Trust," became a love item under the heading (for want of a better one) of "Emotional Need and Complementarity." Conversely, "How much would you enjoy going to a museum with _____?", originally conceived as a love item ("Sharing Emotions and Experiences") was, in the face of the judges' almost unanimous dissent, shifted to the liking category ("Affiliation"). Moreover, several items on which the judges disagreed among themselves were eliminated from the pool.

TABLE 1

ITEMS APPEARING ON INITIAL QUESTIONNAIRE AND
SUMMARY OF JUDGES' CATEGORIZATIONS

	Number of judges categorizing item as:	
	<u>LIKING</u>	<u>LOVE</u>
<u>LIKING ITEMS</u>		
A. GENERAL LIKING AND LIKABILITY		
1. All things considered, how much to you like _____?	9	11
2. How much fun is _____ to be with?	10	10
3. How likable a person is _____?	18	2
*4. How often does _____ get on your nerves?	11	9
5. How favorably would most people react to _____ after a brief acquaintance?	17	3
B. AFFILIATION		
6. How much do you enjoy talking to _____?	11	9
7. How much do you enjoy joking with _____?	12	8
8. How much would you enjoy being in a class with _____?	20	0
9. How much would you enjoy having a snack with _____?	18	2
10. How much would you enjoy watching television with _____?	14	6
11. How much would you enjoy going to a museum with _____?	19	1
12. How much would you enjoy participating in an experiment together with _____?	19	1
C. FAVORABLE EVALUATION		
13. How easily can _____ gain the admiration of others?	16	4
14. How intelligent a person is _____?	12	8
15. How good-natured a person is _____?	19	1
16. How well-adjusted a person is _____?	13	7
17. How mature a person is _____?	9	11
18. How highly would you recommend _____ for a responsible job?	14	6
19. How likely would you be to vote for _____ in a class or group election?	20	0

(Continued)

		Number of judges categorizing item as:	
		<u>LIKING</u>	<u>LOVE</u>
D. EQUITY AND CAMARADERIE			
20.	How likely would you be to lend money to _____ if he or she were in a jam?	13	7
21.	How good a friend is _____?	4	6 (a)
22.	How fair are you in your dealings with _____?	16	4
23.	How likely would you be to take _____'s side in an argument?	8	2 (a)
24.	If _____ did you a good turn, how likely would you be to reciprocate?	20	0
25.	If you participated in an experiment with _____ and you won more money, how likely would you be to split the difference?	18	2
E. RESPECT			
26.	How easily can _____ gain respect from others?	14	6
27.	How much do you respect _____'s opinions?	7	13
28.	How likely is it that you would be influenced by _____'s ideas on some topic?	10	10
29.	How much confidence do you have in _____'s good judgment?	11	9
30.	How much would you enjoy receiving a compliment from _____?	17	3
F. PERCEIVED SIMILARITY			
31.	How much do you like _____'s friends?	13	7
32.	How similar would you say that _____ is to yourself?	12	8
33.	How many common interests do you and _____ have?	10	10
34.	To what extent do you and _____ have the same political attitudes?	16	4
35.	How much do you think _____ likes you?	10	10
<u>LOVE ITEMS</u>			
A. GENERAL			
1.	How much would you say that you love _____?	1	19

(Continued)

	Number of judges categorizing item as:	
	<u>LIKING</u>	<u>LOVE</u>
B. PHYSICAL ATTRACTION		
2. To what extent are you physically attracted to _____?	3	17
3. How much sex appeal would you say that _____ has?	8	12
4. How seductive a person is _____?	5	15
C. IDEALIZATION		
5. How good-looking a person is _____?	10	10
6. How close does _____ come to being perfect?	11	9
7. How unique a person is _____?	4	16
8. To what extent is _____ the kind of person you yourself would like to be?	16	4
9. How proud are you of _____?	—	— (b)
D. SERVING		
10. How many things would you be willing to do for _____?	3	17
11. How concerned are you about _____'s welfare?	3	17
12. To what extent do you feel responsible for _____'s well-being?	1	19
13. If _____ were feeling badly, how important would it be to you to cheer him or her up?	1	19
14. How much would you enjoy giving _____ a present?	9	11
E. EXCLUSIVENESS AND ABSORPTION		
*15. How much do you enjoy having other people around when you are with _____?	8	12
16. How much do you enjoy looking at _____?	8	12
*17. How often do you get bored when you are with _____?	9	11
18. If you were lonely, how likely would you be to seek _____ out?	2	18
19. How possessive do you feel toward _____?	4	16
20. How much would you enjoy having _____ confide in you?	5	15

(Continued)

		Number of judges categorizing item as:	
		<u>LIKING</u>	<u>LOVE</u>
F. EMOTIONAL NEED AND COMPLEMENTARITY			
21.	How much do you trust _____?	2	18
22.	How high an opinion do you think _____ has of you?	8	12
23.	How much do you depend on _____?	2	18
24.	How bad would you feel if you could never be with _____?	0	20
25.	In general, how happy do you feel when you are with _____?	4	16
26.	To what extent do you think that your and _____ 's personalities complement each other?	3	17
G. SHARING EMOTIONS, EXPERIENCES, AND VALUES			
27.	When you are with _____, how often do you find that both of you are in the same mood?	2	18
28.	How bad would it make you feel to watch _____ become embarrassed?	7	13
29.	How much would you enjoy watching a foreign movie with _____?	—	— (b)
30.	To what extent do you and _____ have the same goals in life?	—	— (b)
H. CONTRADICTORY FEELINGS			
31.	To what extent do you feel that your reactions to _____ are irrational?	5	15
32.	How often do your feelings about _____ seem to contradict each other?	9	11
I. NORMLESSNESS			
33.	How much would you enjoy doing something which surprised _____?	2	8 (a)
*34.	If you committed a <u>faux pas</u> in _____ 's presence, how embarrassed would you get?	9	11
35.	How likely would you and _____ be to do something which your friends disapproved of?	—	— (b)

*Reversed item -- the more often, embarrassed, etc., the less liking or loving.

^aThese items were sorted only by Panel B.

^bThese items were not included among those sorted by either panel of judges.

The Initial Questionnaire

After the 70-item pool had been established (35 liking and 35 love), the next step was to try it out on a student sample. It was hoped that students' responses to the items would lead to the specification of liking and love scales which would be internally consistent, intuitively appealing, and conceptually and empirically distinct from one another. For this preliminary administration, each item was presented in a four-point format. For example:

52. How much do you depend on _____?

 NOT VERY MUCH FAIRLY MUCH VERY MUCH EXTREMELY MUCH

As in the above example, each item included a blank space which represented the target person.

The pool of items, with liking and love questions intermingled, was included in a questionnaire administered to 198 introductory psychology students during their regular class sessions. Each respondent was asked to complete the items with respect to his boyfriend or girlfriend, if he had one (or, in the case of an engaged or married respondent, with respect to his fiancée or spouse). The students were instructed to be inclusive in their definitions of "boyfriend" or "girlfriend": "If you are dating several people, but date one of them more often than the others, that person would be considered your boyfriend or girlfriend for the purposes of this questionnaire." Of the 175 unmarried respondents, 130 reported having boyfriends or girlfriends or being engaged. The entire unmarried sample contained a preponderance of women (60.0 percent) and, as might be expected in the college age group, this inequality was even greater among those with boyfriends or girlfriends (67.7 percent

were women). It was upon this sexually imbalanced foundation that the love scale was built.

In order to assess the extent to which the questionnaire items were tapping general interpersonal orientations, as opposed to attitudes toward a specific target person, the respondents were also asked to complete the same items with reference to their "closest friend of the opposite sex other than your boyfriend or girlfriend....This should not be someone you are dating or have a romantic interest in. Preferably, it should be someone of approximately your own age." All but four of the unmarried respondents were able to specify such a platonic friend. The data to be presented are based on the responses of the 130 unmarried respondents with boyfriends, girlfriends, or fiancés (henceforth referred to as "lovers"). Table 2 presents percentage breakdowns of this sample in terms of the respondents' self-reported degree of intimacy with their lovers ("dating," "going together," or "engaged") and with their friends ("acquaintance," "casual friend," or "close friend").

Analysis of Questionnaire Responses

As a starting point in analyzing the questionnaire results, four indices were computed for each of the respondents by averaging scores on the 35 appropriate items: "Liking Lover," "Loving Lover," "Liking Friend," and "Loving Friend." As summarized in Table 3, each of these scales was found to have high internal consistency, with coefficient alpha ranging from .90 to .93. The cross-target correlations were relatively low, indicating that general interpersonal response tendencies accounted for only a small portion of the total variance in responses. In addition, the low correlations between index scores and scores on the Marlowe-Crowne

Social Desirability scale (Crowne & Marlowe, 1964) were at least consistent with the hope that higher and lower liking and loving scores were not dictated by individual tendencies to respond in more or less socially desirable ways. Within both classes of target persons, however, the correlations between the liking and loving indices were very high (.82 in each case).

TABLE 2
PERCENTAGE DISTRIBUTION OF INITIAL SAMPLE BY DEGREE OF
INTIMACY WITH LOVERS AND FRIENDS

	Relationship With Lover	
	Women (N = 88)	Men (N = 42)
Dating	43.2%	47.6%
Going together	51.1	42.8
Engaged	5.7	9.5
	Relationship With Friend	
	Women (N = 87) ^a	Men (N = 39) ^a
Acquaintance	4.6%	2.6%
Casual friend	24.1	35.9
Close friend	71.3	61.5

Note.--Figures refer to unmarried respondents who had boyfriends or girlfriends (or fiancés). Of the initial sample of 198, 23 (18 women and 5 men) were married and 45 (17 women and 28 men) did not have boyfriends or girlfriends.

^aOne female and three male respondents could not specify "platonic friends."

TABLE 3

MEANS, STANDARD DEVIATIONS, INTERNAL CONSISTENCIES, AND
INTERCORRELATIONS OF 35-ITEM LIKING AND LOVING INDICES

	\bar{X}	SD	Coeff. Alpha	Correlation with:			
				Loving lover	Liking friend	Loving friend	Marlowe- Crowne
Liking lover	3.07	.39	.90	.82	.23	.23	.14
Loving lover	2.96	.42	.91		.15	.16	.07
Liking friend	2.79	.44	.93			.82	.07
Loving friend	2.33	.43	.91				.02

Note.--Lover ratings are based on the scores of the 130 unmarried respondents who had boyfriends or girlfriends (or fiancés), and friend ratings are based on the 126 of these who had platonic friends as well. The potential range of mean scores on each scale is 1.0 to 4.0.

A key element in the strategy of scale-construction was the notion of discriminant validity (Campbell, 1960). The aim was to develop internally consistent measures of liking and love which would be both conceptually and empirically distinct from one another. The implication of the results presented in Table 3 was, however, that although internally consistent scales had been successfully created, they were virtually indistinguishable from one another. It was clear, therefore, that if the goal of discriminant validity was to be attained, the content of the two scales would have to be altered. To provide clues as to what alterations were necessary, the 70 x 70 matrices of inter-item correlations were submitted to factor analysis. Two separate analyses were performed, one for the responses with respect to lovers and one for the responses with respect to friends. In each case an arbitrarily determined total of ten factors were extracted by means of the principal components method

and rotated orthogonally to the varimax solution.¹

In the case of each of the two analyses, the five strongest rotated factors were deemed to be interpretable, and worthy of further attention. These factors, as defined by their highest-loading items, are presented in Table 4. Inspection of the factors confirmed the conclusion that responses were not neatly clustered into liking and love categories. In each case, there is a general factor accounting for a large proportion of the total variance and on which many items had reasonably large loadings. Thirty-five of the 70 items had loadings of .30 or more on the first factor for lovers, and 29 of the items had loadings of .30 or more on the first factor for friends. Nevertheless, the items loading highest (.55 and above) on the first factor, particularly for lovers, are almost exclusively those which had been classified as love items. These high-loading items represented particular sub-categories of the original love item pool, and they pointed to a more circumscribed conception of love which, after some deliberation, I decided that I liked. As a result, this factor served as an important guidepost in the subsequent stages of scale-development.

The nature of the primary factor for lovers and the primary factor for friends were surprisingly similar. There were several interesting differences between the two, however. Lover Factor I and Friend Factor I are both defined by items referring to the respondent's concern for the target's welfare and to his felt need to affiliate with and to depend upon

1. Oblique rotations were also performed, yielding solutions which were similar in all major respects to those provided by the orthogonal rotations. The decision to restrict my attention to the orthogonal solutions was, therefore, a somewhat arbitrary one, dictated primarily by the greater mathematical simplicity of orthogonal rotation.

the target. Two of the three items which load highest on Friend Factor I, however, refer to the respondent's perception of the target's feelings toward him. In light of this distinction, Lover Factor I was labeled "Love," whereas Friend Factor I was labeled "Mutual Friendship." An additional distinction between the two major factors which is at least consonant with these labels is that items referring to an exclusive, absorptive orientation (e.g., "How much would you enjoy having _____ confide in you?"; "How possessive do you feel toward _____?") are located more prominently on Lover Factor I than on Friend Factor I. Another difference between the two factors concerns the items referring to physical attraction. For both lovers and friends, these items form a relatively independent cluster of their own, which has been labeled the "Sex" factor. But it is interesting to note that for lovers, and not for friends, two of the "Sex" items have at least moderate loadings on the principal factor. In particular, responses to the question "How much do you enjoy looking at _____?" were related to both the "Love" factor and the "Sex" factor among lovers, but only to the latter among friends. Visual behavior, therefore, may be seen as providing a conceptual link between love and sex.

Turning from love to liking, it may be observed that Friend Factor II is predominated by items referring to two of the initially posited elements of liking--"likability" and "favorable evaluation." These items seem to be relatively distinct from two other clusters which might be seen as relevant to liking-- "Respect and Perceived Similarity" (Friend Factor III) and "Affiliation" (Friend Factor IV). Because of the desire to construct an internally consistent scale of liking, as well as of love, I decided to narrow down the working definition of liking

to the likability-favorable evaluation cluster. For this reason, Friend Factor II has been labeled "Liking." It should be noted, however, that the loadings of items which had initially been categorized as liking had a somewhat different pattern in the lover analysis. Specifically, items loading highly on the "Liking" factor (Friend Factor II) were likely to be represented on either Lover Factor II ("Likability") or Lover Factor III ("Admiration and Respect"). It seemed that in at least this respect, the respondents' views of their lovers were more highly differentiated than their views of their platonic friends. It may be instructive to note, in this connection, that the four items loading highest on Lover Factor II ("Likability") and on Friend Factor II ("Liking") all make explicit or implicit reference to evaluations of the target by other people (e.g., "How easily can _____ gain the admiration of others?"). These references to the target's more general "social stimulus value" (cf. Lerner & Simmons, 1966, from whom these particular items were borrowed) form a relatively distinct factor when people are asked to respond to their lovers. When people are evaluating their platonic friends, on the other hand, responses to these questions are more highly related to their own evaluations of the target person. In other words, and at the risk of oversimplification, people tend to like "likable" friends more than they tend to like "likable" lovers.

TABLE 4

SUMMARY OF LOVER AND FRIEND FACTORS

<u>LOVER FACTORS</u>	
I. LOVE (Contribution=12.38)	<u>LOADING</u>
7. All things considered, how much do you like ___?	.836
*9. How bad would you feel if you could never be with ___?	.813
*23. How much would you say that you love ___?	.810
*6. How concerned are you about ___'s welfare?	.807
*17. How many things would you do for ___?	.804
*19. To what extent do you feel responsible for ___'s well-being?	.784
*50. If ___ were feeling badly, how important to you would it be to cheer him or her up?	.753
25. How good a friend is ___?	.670
*20. In general, how happy do you feel when you are with ___?	.631
*22. How much would you enjoy having ___ confide in you?	.618
*53. How much do you depend on ___?	.615
*16. How possessive do you feel toward ___?	.604
*29. If you were lonely, how likely would you be to seek ___ out?	.604
*15. How much do you enjoy looking at ___?	.552
*66. How much would you enjoy giving ___ a present?	.550
1. How much do you respect ___'s opinions?	.546
4. How much do you enjoy talking to ___?	.538
11. How much do you think ___ likes you?	.531
60. How much would you enjoy having a snack with ___?	.504
33. How likely would you be to lend money to ___ if he or she were in a jam?	.498
63. How much fun is ___ to be with?	.478
*45. To what extent do you think that your and ___'s personalities complement each other?	.478
24. How much would you enjoy receiving a compliment from ___?	.447
*26. How proud are you of ___?	.443
*3. How much would you enjoy doing something which surprised ___?	.425
*44. How high an opinion do you think ___ has of you?	.417
*41. How close does ___ come to being perfect?	.415
*62. To what extent do you and ___ have the same goals in life?	.407
*70. How much do you trust ___?	.378
*55. To what extent is ___ the kind of person you yourself would like to be?	.371
*8. How much sex appeal would you say that ___ has?	.352

Note.--For each analysis (lover and friend) the five strongest factors are presented, as summarized by all items loading .30 or more. Items preceded by an asterisk are those which were initially categorized as love items. The numbers preceding the items refer to their position on the initial questionnaire.

(Continued)

LOVER FACTORS (Continued)LOADING

21. How much confidence do you have in ___'s good judgment?	.350
27. How much would you enjoy watching television with ___?	.322
43. If ___ did you a good turn, how likely would you be to reciprocate?	.316
14. How much would you enjoy participating in an experiment together with ___?	.305

II. LIKABILITY (Contribution=4.48)

37. How favorably would most people react to ___ after a brief acquaintance?	.765
56. How likable a person is ___?	.726
28. How easily can ___ gain the admiration of others?	.707
46. How easily can ___ gain respect from others?	.704
58. How good-natured a person is ___?	.493
*26. How proud are you of ___?	.477
*39. How unique a person is ___?	.354
63. How much fun is ___ to be with?	.337
36. How well-adjusted a person is ___?	.334
*55. To what extent is ___ the kind of person you yourself would like to be?	.319
*41. How close does ___ come to being perfect?	.303

III. ADMIRATION AND RESPECT (Contribution=4.95)

67. How mature a person is ___?	.731
30. How intelligent a person is ___?	.701
21. How much confidence do you have in ___'s good judgment?	.692
59. How highly would you recommend ___ for a responsible job?	.555
36. How well-adjusted a person is ___?	.548
51. How likely would you be to vote for ___ in a class or group election?	.498
*41. How close does ___ come to being perfect?	.494
*62. To what extent do you and ___ have the same goals in life?	.446
1. How much do you respect ___'s opinions?	.445
*70. How much do you trust ___?	.400
*26. How proud are you of ___?	.397
*55. To what extent is ___ the kind of person you yourself would like to be?	.356
*47. When you are with ___, how often do you find that both of you are in the same mood?	.340
13. How likely is it that you would be influenced by ___'s ideas on some topic?	.332

(Continued)

<u>LOVER FACTORS (Continued)</u>	<u>LOADING</u>
4. How much do you enjoy talking to ___?	.305
52. How much do you like ___'s friends?	.302
 IV. CAMARADERIE (Contribution=3.01)	
43. If ___ did you a good turn, how likely would you be to reciprocate?	.596
32. How likely would you be to take ___'s side in an argument?	.582
18. To what extent do you and ___ have the same political attitudes?	.453
51. How likely would you be to vote for ___ in a class or group election?	.447
*66. How much would you enjoy giving ___ a present?	.447
*61. How bad would it make you feel to watch ___ become embarrassed?	.425
52. How much do you like ___'s friends?	.369
40. How often does ___ get on your nerves? <input checked="" type="checkbox"/> Reversed scoring	-.320
 V. SEX (Contribution=3.10)	
*69. To what extent are you physically attracted to ___?	.704
*48. How seductive a person is ___?	.688
*8. How much sex appeal would you say that ___ has?	.674
*15. How much do you enjoy looking at ___?	.453
*65. How good-looking a person is ___?	.438
 <u>FRIEND FACTORS</u> 	
I. MUTUAL FRIENDSHIP (Contribution=9.44)	
11. How much do you think ___ likes you?	.790
7. All things considered, how much do you like ___?	.747
*44. How high an opinion do you think ___ has of you?	.737
*6. How concerned are you about ___'s welfare?	.733
*9. How bad would you feel if you could never be with ___?	.713
25. How good a friend is ___?	.707
*17. How many things would you do for ___?	.672
*23. How much would you say that you love ___?	.658
*19. To what extent do you feel responsible for ___'s well-being?	.656
*50. If ___ were feeling badly, how important to you would it be to cheer him or her up?	.572
*20. In general, how happy are you when you are with ___?	.563
*29. If you were lonely, how likely would you be to seek ___ out?	.543

(Continued)

<u>FRIEND FACTORS (Continued)</u>	<u>LOADING</u>
*26. How proud are you of ___?	.539
*66. How much would you enjoy giving ___ a present?	.502
52. How much do you like ___'s friends?	.461
33. How likely would you be to lend money to ___ if he or she were in a jam?	.433
*22. How much would you enjoy having ___ confide in you?	.431
1. How much do you respect ___'s opinions?	.409
4. How much do you enjoy talking to ___?	.393
24. How much would you enjoy receiving a compliment from ___?	.392
*70. How much do you trust ___?	.380
63. How much fun is ___ to be with?	.373
*53. How much do you depend on ___?	.368
60. How much would you enjoy having a snack with ___?	.357
38. How much do you enjoy joking with ___?	.354
*45. To what extent do you think that your and ___'s personalities complement each other?	.333
*47. When you are with ___, how often do you find that both of you are in the same mood?	.317
49. How many common interests do you and ___ have?	.306
*61. How bad would it make you feel to watch ___ become embarrassed?	.304

II. LIKING (Contribution=6.07)

46. How easily can ___ gain respect from others?	.808
37. How favorably would most people react to ___ after a brief acquaintance?	.727
28. How easily can ___ gain the admiration of others?	.698
56. How likable a person is ___?	.674
59. How highly would you recommend ___ for a responsible job?	.626
36. How well-adjusted a person is ___?	.581
*41. How close does ___ come to being perfect?	.568
67. How mature a person is ___?	.552
58. How good-natured a person is ___?	.510
51. How likely would you be to vote for ___ in a class or group election?	.496
52. How much do you like ___'s friends?	.394
*70. How much do you trust ___?	.349
*26. How proud are you of ___?	.347
63. How much fun is ___ to be with?	.328
*55. To what extent is ___ the kind of person you yourself would like to be?	.308

(Continued)

FRIEND FACTORS (Continued)

III. RESPECT AND PERCEIVED SIMILARITY (Contribution=5.73)	<u>LOADING</u>
68. How similar would you say that ___ is to yourself?	.724
*55. To what extent is ___ the kind of person you yourself would like to be?	.711
21. How much confidence do you have in ___'s good judgment?	.641
13. How likely is it that you would be influenced by ___'s ideas on some topic?	.550
67. How mature a person is ___?	.544
*62. To what extent do you and ___ have the same goals in life?	.536
*45. To what extent do you think that your and ___'s personalities complement each other?	.529
32. How likely would you be to take ___'s side in an argument?	.504
36. How well-adjusted a person is ___?	.451
49. How many common interests do you and ___ have?	.432
1. How much do you respect ___'s opinions?	.407
4. How much do you enjoy talking to ___?	.404
18. To what extent do you and ___ have the same political attitudes?	.398
*70. How much do you trust ___?	.388
59. How highly would you recommend ___ for a responsible job?	.375
*35. How often do you get bored when you are with ___? <u>[Reversed scoring]</u>	.337
40. How often does ___ get on your nerves? <u>[Rev. scoring]</u>	.327
*20. In general, how happy do you feel when you are with ___?	.315
43. If ___ did you a good turn, how likely would you be to reciprocate?	.310
*41. How close does ___ come to being perfect?	.302
 IV. AFFILIATION (Contribution=5.75)	
14. How much would you enjoy participating in an experiment together with ___?	.664
12. How much would you enjoy being in a class with ___?	.639
* 3. How much would you enjoy doing something which surprised ___?	.629
60. How much would you enjoy having a snack with ___?	.600
*22. How much would you enjoy having ___ confide in you?	.569
63. How much fun is ___ to be with?	.508
*66. How much would you enjoy giving ___ a present?	.491
24. How much would you enjoy receiving a compliment from ___?	.466
38. How much do you enjoy joking with ___?	.466
43. If ___ did you a good turn, how likely would you be to reciprocate?	.459
*42. How much would you enjoy seeing a foreign movie with ___?	.442

(Continued)

<u>FRIEND FACTORS (Continued)</u>	<u>LOADING</u>
*29. If you were lonely, how likely would you be to seek ___ out?	.427
4. How much do you enjoy talking to ___?	.407
27. How much would you enjoy watching television with ___?	.398
*17. How many things would you be willing to do for ___?	.395
31. How much would you enjoy going to a museum with ___?	.372
*20. In general, how happy do you feel when you are with ___?	.349
*50. If ___ were feeling badly, how important to you would it be to cheer him or her up?	.334
54. How fair are you in your dealings with ___?	.315
*35. How often do you get bored when you are with ___? Reversed scoring	.307
V. SEX (Contribution=4.62)	
* 8. How much sex appeal would you say that ___ has?	.871
*65. How good-looking a person is ___?	.814
*69. To what extent are you physically attracted to ___?	.772
*15. How much do you enjoy looking at ___?	.756
*48. How seductive a person is ___?	.749
28. How easily can ___ gain the admiration of others?	.322

To summarize this section, the results of the factor analyses of students' responses with respect to their lovers and their friends led to a narrowing down of the working definitions of both liking and loving. The more circumscribed conception of liking is grounded in the items loading highly on Friend Factor II, referring to both general "likability" and the tendency to evaluate the target highly. The more circumscribed conception of love is grounded in the items that loaded highly on Lover Factor I, referring to felt affiliative and dependent needs, an exclusive and absorptive orientation, and the predisposition to help.

Before moving on to the final steps of scale-development, it may be well to take note of the potentially embarrassing finding that for both lovers and friends, the item, "All things considered, how much do you like _____?" seems to be related to love, rather than to liking. From one point of view this anomaly need not be cause for excessive concern.

The fact that our respondents consider "liking" to be an important aspect of what we have chosen to label "love" does not in itself invalidate our attempt to distinguish the two phenomena. Although we may wish that our respondents had been more discriminating in this regard, a glance back at Table 1 indicates that our judges also had trouble with this discrimination. Eleven of the 20 judges placed the "liking" item in the love category.

TABLE 5
CORRELATIONS OF ITEMS WITH 11-ITEM CORE INDICES OF LIKING AND LOVE

	<u>LOVE INDEX</u>	
	<u>Correlation with love index</u>	<u>Correlation with liking index</u>
* 9. How bad would you feel if you could never be with ___?	.727	.416
7. All things considered, how much do you like ___?	.647	.254
19. To what extent do you feel responsible for ___'s well-being?	.572	-.135
*17. How many things would you be willing to do for ___?	.568	.119
*22. How much would you enjoy having ___ confide in you?	.554	.119
23. How much would you say that you love ___?	.553	.272
24. How much would you enjoy receiving a compliment from ___?	.537	.287
*53. How much do you depend on ___?	.532	.213
*20. In general, how happy do you feel when you are with ___?	.518	.452
26. How proud are you of ___?	.518	.607
41. How close does ___ come to being perfect?	.516	.480
* 6. How concerned are you about ___'s welfare?	.508	.157
43. If ___ did you a good turn, how likely would you be to reciprocate?	.506	.198
*16. How possessive do you feel toward ___?	.492	-.006
*29. If you were lonely, how likely would you be to seek ___ out?	.441	.177
*50. If ___ were feeling badly, how important to you would it be to cheer him or her up?	.438	.160
11. How much do you think ___ likes you?	.434	.100
70. How much do you trust ___?	.407	.347
*15. How much do you enjoy looking at ___?	.401	.179
44. How high an opinion do you think ___ has of you?	.379	.387
*66. How much would you enjoy giving ___ a present?	.378	-.010

(Continued)

TABLE 5 (Continued)

	<u>LIKING INDEX</u>	
	Correlation with <u>liking index</u>	Correlation with <u>love index</u>
*67. How mature a person is ___?	.717	.211
*46. How easily can ___ gain respect from others?	.706	.127
*30. How intelligent a person is ___?	.663	.280
*28. How easily can ___ gain the admiration of others?	.646	.196
68. How similar would you say that ___ is to yourself?	.623	-.070
*36. How well-adjusted a person is ___?	.617	.239
26. How proud are you of ___?	.607	.518
*21. How much confidence do you have in ___'s good judgment?	.596	.350
47. When you are with ___, how often do you find that both of you are in the same mood?	.591	.158
*59. How highly would you recommend ___ for a responsible job?	.579	.321
1. How much do you respect ___'s opinions?	.572	.307
39. How unique a person is ___?	.562	.281
*37. How favorably would most people react to ___ after a brief acquaintance?	.525	.117
55. To what extent is ___ the kind of person you yourself would like to be?	.506	.145
*51. How likely would you be to vote for ___ in a class or group election?	.496	.255
*56. How likable a person is ___?	.490	.146
65. How good-looking a person is ___?	.487	.181
41. How close does ___ come to being perfect?	.480	.516
62. To what extent do you and ___ have the same goals in life?	.476	.258
14. How much would you enjoy participating in an experiment together with ___?	.457	.301
20. In general, how happy do you feel when you are with ___?	.452	.518
9. How bad would you feel if you could never be with ___?	.416	.727
49. How many common interests do you and ___ have?	.404	.102
.		
.		
.		
.		
*58. How good-natured a person is ___?	.255	-.109

Note.--Based on lover responses of 47 additional unmarried respondents (17 men and 30 women). Asterisked items are those which comprised the respective indices, and correlations involving these items are corrected to represent the correlation between the item and the index not including that item (i.e., the sum of the other 10 items). All items correlating over .400 with the respective scales are listed.

11-Item Core Indices

Following the directions suggested by the factor analysis, 11-item "core indices" of love and liking were specified. To permit an unbiased assessment of the internal consistency and discriminant validity of these indices, they were computed for a new sample of 47 unmarried students (17 men and 30 women) who had boyfriends or girlfriends (or fiancés). These respondents completed the same questionnaire in their introductory psychology classes, but their results were not included in the original analyses. Table 5 indicates the composition of the two core indices and presents item-scale correlations for the responses with respect to lovers. These data suggest that, on the whole, the core indices were both internally consistent and distinct from one another. Ten of the eleven love items and ten of the eleven liking items had corrected correlations with their respective indices of more than .40. In each of the 22 instances, the items correlated more highly with the appropriate index than with the inappropriate one. These conclusions are bolstered by the fact that coefficient alpha, which is equal to the average of all split-half reliability indices, was high in both cases--.830 for love and .869 for liking. The correlation between the two indices, on the other hand, had a reassuringly moderate value of .303.

Given this evidence of internal consistency and discriminant validity, an attempt was made to assess the validity of the core indices with respect to two external criteria--the respondent's degree of intimacy with his or her lover, and whether the target was one's lover or one's platonic friend. For this purpose the two core indices were computed for the combined samples, including married and (for the friend responses) non-dating students. Each index is equal to the sum of scores on its

11 component items. These values, for both the lover and friend targets, are presented in Table 6. As the upper portion of Table 6 indicates, the respondents' love for their lovers increased sharply as their self-reported relationships progressed from "dating" to "going together" to "engaged." Among the women there was an intriguing tendency for love scores to take a downward turn as the relationship changed from engagement to marriage, but there are too few cases in these cells to permit us to linger on its possible implications. Liking scores, on the other hand, showed a less dramatic increase as a function of increasing intimacy for women, and virtually no such increase at all for men. The pattern of results is an intuitively sensible one. One should, of course, love someone he is "going together" with more than someone he is merely dating, and his fiancée more than either. But he need not like his partner differentially (i.e., consider her to be more likable and evaluate her more positively) as a function of these differences in degree of intimacy.

A comparison of the upper and lower portions of Table 6 yields further support for this line of reasoning. For both sexes, and at all degrees of intimacy, lovers are loved considerably more than are friends, but they are liked only slightly more. More careful examination of the friend responses reveals a less obvious result, which is also very much in line with the emerging conception of love. Among women, as the relationship with one's lover progresses from non-existent (among respondents who did not have boyfriends) through marriage, love for one's friend steadily decreases. A similar shift takes place for men, although it is concentrated in the comparison between the "dating" and "going together" stages.

TABLE 6

MEANS, STANDARD DEVIATIONS, AND LOVE-LIKING CORRELATIONS OF 11-ITEM CORE INDICES

Relationship with lover	LOVER TARGET						FRIEND TARGET					
	MEN			WOMEN			MEN			WOMEN		
	N	Love \bar{X}	Love SD	Liking \bar{X}	Liking SD	Love-Liking r	N	Love \bar{X}	Love SD	Liking \bar{X}	Liking SD	Love-Liking r
Dating	28	30.54	7.34	33.39	4.97	.717	52	32.33	5.80	32.79	5.86	.292
Going together	25	35.64	4.96	33.28	5.72	.542	56	36.59	5.55	35.18	5.21	.320
Engaged	5	39.40	2.87	34.20	6.11	(a)	9	40.22	2.10	36.78	2.74	(a)
Married	13	39.23	4.34	34.85	4.13	(a)	24	37.00	6.86	37.88	5.26	.591

Relationship with lover	LOVER TARGET						FRIEND TARGET					
	MEN			WOMEN			MEN			WOMEN		
	N	Love \bar{X}	Love SD	Liking \bar{X}	Liking SD	Love-Liking r	N	Love \bar{X}	Love SD	Liking \bar{X}	Liking SD	Love-Liking r
(Non-existent)	34	26.03	6.16	31.09	5.00	.458	23	28.48	4.99	33.22	5.40	.015
Dating	26	27.31	6.95	32.58	5.86	.619	50	25.96	6.00	31.30	5.60	.324
Going together	25	24.00	5.59	29.20	5.20	.320	57	25.00	5.89	31.70	6.14	.598
Engaged	4	24.25	1.78	32.75	2.16	(a)	9	23.11	3.51	29.44	5.96	(a)
Married	11	24.91	5.09	31.73	4.75	(a)	24	22.21	5.21	33.33	5.17	.546

Note.--Based on combined results of initial and additional sample. Each index is equal to the sum of scores on its 11 component items. The potential range of mean scores is 11.0 to 44.0.

^aCorrelations are not reported when the cell N's are less than 20.

To the extent that love involves a focusing of emotion and interest upon a single person, these results are eminently reasonable, and perhaps necessary. They may also be seen as striking an empirical blow against Fromm's (1956) notion that love for anyone implies, ipso facto, love for everyone. This pattern is also revealed, but somewhat less sharply, in women's and men's liking for their friends.

Finally, the correlations between the love and liking indices presented in Table 6 merit attention. Considering only dating and going-together respondents, the categories with which we will primarily be concerned in the remainder of this research, love and liking for one's lover are more highly correlated among men (combined $r=.58$) than among women (combined $r=.35$). These correlations are almost identical to those later obtained when a large sample of dating couples completed the love and liking scales in their final version. The implications of this sex difference will be discussed when those data are presented. No such clear sex difference was found when the target was one's platonic friend. Within the dating and going-together sub-sample the love-liking correlation is .53 for men and .47 for women.

The Final Scales

Now that internally consistent and distinct sets of love and liking items had been identified, the time had come to translate the core indices into the love and liking scales which would be used in the remainder of the research. Inspection of the item-scale correlations presented in Table 5 helped to crystallize the emerging conception of love as involving felt affiliative and dependent need, a predisposition to help, and an exclusive, absorptive orientation. The latter two of these components

suggested the addition of two new items to the scale, one dealing with willingness to forgive and the other concerning the desire to confide in the loved one. On the liking side of the ledger, the item-scale correlations pointed to the resurrection of items dealing with perceived similarity. This suggestion was an appealing one inasmuch as the similarity-liking relationship is probably the single empirical principle which has received more support than any other in the area of interpersonal attraction. Finally, it was decided to change the format of all the items from questions with fixed alternatives to statements to which respondents would indicate their degree of agreement or disagreement on a continuous linear scale. It was recognized that this change to a more common format would be likely to increase to some extent the common variance of the two scales. It was felt, however, that this would be an appropriately conservative procedure since it seemed likely that the distinctiveness of the two indices might have been in part an artifactual result of differences in wording of alternatives, rather than of item content per se. It was felt, in addition, that the continuous scale might provide greater freedom for the respondents in expressing their attitudes. The final scales, with the common response continuum presented only for the first item, were as follows:

LOVE

1. If ___ were feeling badly, my first duty would be to cheer him (her) up.

Not at all true; disagree completely	Moderately true; agree to some extent	Definitely true; agree completely

2. I feel that I can confide in ___ about virtually everything.
3. I find it easy to ignore ___'s faults.
4. I would do almost anything for ___.
5. I feel very possessive toward ___.
6. If I could never be with ___, I would feel miserable.
7. If I were lonely, my first thought would be to seek ___ out.

(Continued)

LOVE, Continued

8. One of my primary concerns is ___'s welfare.
9. I would forgive ___ for practically anything.
10. I feel responsible for ___'s well-being.
11. When I am with ___, I spend a good deal of time just looking at him (her).
12. I would greatly enjoy being confided in by ___.
13. It would be hard for me to get along without ___.

LIKING

1. When I am with ___, we are almost always in the same mood.
2. I think that ___ is unusually well-adjusted.
3. I would highly recommend ___ for a responsible job.
4. In my opinion, ___ is an exceptionally mature person.
5. I have great confidence in ___'s good judgment.
6. Most people would react very favorably to ___ after a brief acquaintance.
7. I think that ___ and I are quite similar to each other.
8. I would vote for ___ in a class or group election.
9. I think that ___ is one of those people who quickly wins respect.
10. I feel that ___ is an extremely intelligent person.
11. ___ is one of the most likable people I know.
12. ___ is the sort of person whom I myself would like to be.
13. It seems to me that it is very easy for ___ to gain admiration.

Summary: The Emerging Conception of Love

Several different sorts of evidence have been brought to bear on the problem of conceptualizing love. Some degree of consensual validation was obtained by having successive panels of judges sort items into love and liking categories. Evidence related to internal consistency and discriminant validity was then obtained by factor analysis of students' responses to an initial pool of 70 items. This pointed the way to the construction of 11-item core indices of love and liking and an assessment of their internal validity for a new group or respondents. In addition, it was possible to assess scores on the core indices against certain external criteria--whether the target was one's boyfriend or girlfriend or one's platonic friend, and in the former case, the degree of intimacy.

of the relationship.

It should be stressed that all of these approaches to validation were seen as advisory rather than conclusive. No fixed criteria for inclusion or exclusion of an item were ever established. A standing assumption was that progress toward a meaningful conception of love (as opposed to merely a reliable scale) could not be made without a healthy dose of intuition. Nevertheless, it is clear in retrospect that the results of the various validating procedures had a profound impact on the author's private thoughts about which attitudinal constellation might most profitably be labeled "love." Most importantly, the initial, eclectically formulated conception of love was narrowed down. Because items about physical attraction formed an independent factor, for example, it was decided that sex need not be part of the concept of love. (Instead, our attention may be drawn to the empirical relationships between love and sex, a problem which has been on people's minds for centuries, but which has never been empirically investigated.) The "idealization" component of love (see Table 1) also fell by the wayside, largely because of the difficulty of writing items which tapped "idealization" as distinct from "favorable evaluation." (But in this case the investigator could not be dissuaded completely. The item, "I would forgive _____ for practically anything," which reflects a sort of idealization as well as the predisposition to serve, was added to the love scale at press time.) The cluster of "sharing emotions, experiences, and values" was also dropped, with one of its component items (referring to similarity of moods) submerging for a while and finally surfacing on the liking scale. Neither items referring to "contradictory feelings"

nor those in the initial "normlessness" category found their way onto the final love scale. In the former case, the task of constructing items about contradictory feelings which would relate positively to items about positive feelings proved to be beyond the scale-maker's abilities. In the case of the normlessness cluster, on the other hand, the original theoretical rationale, referring to the tendency for lovers to spite society and withdraw unto themselves, remains a prominent basis for the scale's emphasis on exclusiveness and absorption.

Although it is hoped that the love scale is factorially unitary, our working definition of love can be summarized most efficiently as a conceptual trinity. Its three components are:

1. Affiliative and dependent need--e.g., "If I could never be with _____, I would feel miserable"; "It would be hard for me to get along without _____."

2. Predisposition to help--e.g., "If _____ were feeling badly, my first duty would be to cheer him (her) up"; "I would do almost anything for _____."

3. Exclusiveness and absorption--e.g., "I feel very possessive toward _____"; "I feel that I can confide in _____ about virtually everything."

Since our conceptual starting points were highly diverse, it is perhaps fitting that the working love scale retains an eclectic flavor. The affiliative and dependent need component evokes the Freudian view of love as sublimated sexuality. The predisposition to help is most in tune with Fromm's analysis of the components of love (which he identifies as care, responsibility, respect, and knowledge). The third component, that of exclusiveness and absorption, may be the most central from a

theoretical standpoint. It is in line with Freud's thermodynamic model of man inasmuch as it points to a channeling of emotion in a single direction. Exclusiveness is basically incompatible with Fromm's conception of love as a personality trait, but it is nevertheless recognized by Fromm as the characteristic which distinguishes "erotic" love from all other forms. Absorption in a single other person is also the aspect of love which is pointed to most directly by Slater's (1963) analysis of social regression.

If I had to sum up the conception of love which has been arrived at thus far by referring to a single item, it would be, "When I am with _____, I spend a good deal of time just looking at him (her)." This is because looking may well be a behavior which is uniquely relevant to several of the components of love. Wistful, appreciative, or voyeuristic looking may serve as a direct expression of emotional or sexual need. Tender, solicitous looking reflects concern by providing information about the loved one's feelings and needs. And when it is mutual, looking seems to epitomize the spirit of dyadic withdrawal. Lovers are oblivious to the world and to the social forces about them--they have eyes only for each other. The fact that eye contact has also been identified as a central aspect of mother-child attachment (e.g., Robson, 1967) serves to increase my confidence in the notion that looking is in fact, as well as in fiction, an important key to the nature of love.

CHAPTER III

QUESTIONNAIRE STUDY: A. LOVE'S CORRELATES

Now that a working love scale, as well as a parallel liking scale, was in hand, the next step in the construct-validated enterprise was to administer the scale, along with a variety of other measures, to a sample of dating couples. This questionnaire data would be useful for several purposes. First, it would provide a further check on the internal consistency and discriminant validity of the love scale. Second, the relationships between measured love and other variables would help to elaborate the emerging concept of love and, simultaneously, to explore love's empirical correlates. By administering the love scale and other measures to both members of dating couples, it would also be possible to investigate intra-couple relationships. Finally, the questionnaire study would provide a pool of dating couples who would serve as subjects in the subsequent laboratory experiment.

In this chapter I will present the procedures and main results of the questionnaire study, including data concerning the accuracy of respondents in estimating their partners' love for them. Most of these results are correlational in nature. In the following chapter additional results of the questionnaire study will be presented, focusing on the interplay of sociological and psychological determinants of romantic love.

The Questionnaire

The questionnaire is presented in its entirety in Appendix A. The following is a summary of the measures obtained:

1. Love and liking scales. The love and liking scales, with their component items intermingled, were completed three times -- first, with respect to the respondent's boyfriend or girlfriend; second, with respect to his or her closest same-sex friend; and third, as he thought his boyfriend or girlfriend felt about him. The respondent's love and liking scores were obtained from the first of these administrations. The rationale for the second administration (responses with respect to closest same-sex friend) was the same as that underlying the "platonic friend" set on the preliminary questionnaire. It would provide an estimate of the extent to which love and liking scores were determined by more general interpersonal orientations. (It seemed likely that respondents would have closer relationships with a same-sex friend than with a "platonic friend," and that attitudes toward same-sex friends would therefore provide a more suitable comparison with attitudes toward dating partners.) The third administration of the two scales ("the way you think your boyfriend or girlfriend feels about you") produced measures of perceived love and liking, thus facilitating the investigation of perceptual accuracy. The three administrations were placed at separate points in the questionnaire.

2. Personality measures. Three personality measures were included -- the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964), a version of the California F-Scale (Anthanasίου, 1968), and a 10-item scale of "romanticism." The romanticism scale was adapted from Hobart (1958), who had revised the scale developed by Gross (1944). Its items are intended to assess people's attitudes toward love itself, with high scores reflecting allegiance to certain aspects of the "romantic ideal" (e.g., agreeing that "To be in love is to be in love forever" and that "A person should marry whomever he loves regardless of social position," and

disagreeing with the notions that "True love should be suppressed in cases where its existence conflicts with prevailing standards of morality" and that "Most of us could sincerely love any one of several people equally well.")

3. Background information. Questions were included about such individual background variables as age, college class, type of residence, academic major, grade-point average, father's occupation, religion, family size, and birth order.

4. Information about the relationship. Respondents were asked for such facts about their dating relationship as the length of time they had known and had dated their partners, and how often they saw one another. In addition, each respondent was asked to categorize the relationship as "dating," "going together," or "engaged"; to indicate whether he thought he and his partner were "in love" ("yes," "no," or "uncertain"); and to estimate the likelihood that he and his partner would marry each other. The last of these questions was accompanied by a 10-point scale, ranging from "0-10%" through "91-100%." Finally, respondents were asked to indicate the number of times they had "gone together" with someone and the number of times they had been in love (not counting their present relationship) since the time they entered high school.

The questionnaire was 20 pages long and took an average of about 35 minutes to complete.

Procedure

A sample of student dating couples was obtained by means of advertisements in the Michigan Daily and posters put up around campus. The advertisements introduced the study in the following terms:

Only DATING COUPLES can do it!

Gain insight into your relationship by participating
in a unique social-psychological study
...and get paid for it too!

*Who can participate? All Michigan student couples
(heterosexual only) who are dating regularly, going together,
or engaged. (Married couples are not eligible.)

*What do you have to do? Simply show up with your boyfriend
or girlfriend at one of the times and places listed. You will
be asked to fill out a confidential questionnaire, and each of
you will be paid \$1 for the one-hour session.

*Then what? All those who fill out the questionnaire will have
a chance to be selected as subjects for a subsequent experiment,
which (if you agree to participate) should prove to be both
exciting and lucrative.

BOTH MEMBERS OF A COUPLE MUST TAKE PART

The advertising campaign proved to be slightly too successful.
Approximately 200 couples appeared at each of the two scheduled sessions,
many more than could be accommodated. Therefore, couples were allowed to
participate on a first-come-first-served basis, with about 90 couples at
each session.¹ Before taking seats in the auditorium, the couples went
through a registration procedure in which they were paid (\$1 per person)
and were asked to supply their names, addresses, and telephone numbers on
separate index cards (pink for women, blue for men) which were keyed by
number to the copy of the questionnaire they were given. The two part-
ners were then asked to take seats at some distance from one another.
The verbal instructions given at each session stressed the importance
of thoughtful and honest responses to the success of the research. In
this connection, the instructions included the following remarks:

In order to encourage you to answer candidly, let me
stress that your responses are completely confidential. You

¹Six additional couples completed the questionnaire at a session
prior to the two main sessions. These were couples who had called to
schedule an alternative time because they could not make either of the
pre-scheduled sessions.

won't receive any scores or ratings based on your questionnaire responses, and no one will be able to find out how his or her boyfriend or girlfriend answered the questions. And it would be best if you don't feel compelled to tell each other afterward how you answered the questions. In addition, your name will not be attached to the questionnaire when we examine the responses. The only purpose of keeping a separate record of your names is so that we can relate people's questionnaire responses to the results of the (subsequent) experiment. In other words, in all the analyses of the questionnaire you will be known to us only as a number--never by your name.

A total of 193 couples completed the questionnaire. In order to obtain greater homogeneity with respect to chronological age, 11 couples in which the woman was over 21 years old were deleted from the sample. (No age limits for men were established.) This left a total sample of 182 couples. Most of the analyses to be presented in this chapter, however, will be based only on responses of the 158 couples who were categorized as non-engaged. As will be seen shortly, the two members of a couple did not always agree as to whether or not they were "engaged." Therefore, the following operational definition of engagement was established: for a couple to be considered "engaged," both members had to indicate that they were engaged and both members had to estimate their probability of marriage as 91-100%.

Characteristics of the Sample

Percentage breakdowns of the sample with respect to several demographic and relationship-centered variables are presented in Table 7. It will be seen that the sample comprised a broad cross-section of undergraduates with respect to class and type of residence, with some overrepresentation of sophomores and juniors and underrepresentation of freshmen and seniors. There were also a number of graduate and professional men, most of whom were paired with senior women. The mean age of

TABLE 7

PERCENTAGE DISTRIBUTION OF SAMPLE ON SELECTED CHARACTERISTICS

	WOMEN	MEN
<u>College class</u>		
Freshman	19.8	11.0
Sophomore	31.3	27.5
Junior	31.3	29.7
Senior	15.4	24.2
Graduate or professional	1.6	7.1
Special or other	.5	.5
	<u>99.9</u>	<u>100.0</u>
<u>Residence</u>		
Sorority or fraternity	13.7	11.0
Dormitory	51.6	28.6
Apartment or house	31.3	60.0
Co-op	2.7	0.0
Other	0.5	0.5
	<u>99.8</u>	<u>100.1</u>
<u>Religion</u>		
Protestant	53.8	48.4
Catholic	17.0	17.0
Jewish	24.7	26.4
None or other	4.4	8.2
	<u>99.9</u>	<u>100.0</u>
<u>Description of relationship</u>		
Dating	19.2	14.3
Going together	61.5	63.7
Engaged	19.2	22.0
	<u>99.9</u>	<u>100.0</u>
<u>"Would you say that you and _____ are in love?"</u>		
No	10.4	8.8
Uncertain	20.9	23.1
Yes	68.7	68.1
	<u>100.0</u>	<u>100.0</u>
<u>"How long have you been dating or going with _____?"^a</u>		
1 to 3 months	22.0	
4 to 12 months	33.0	
13 to 24 months	22.0	
25 or more months	23.1	
	<u>100.1</u>	

Note.--Based on total sample of 182 couples.

^aBased on the average of the two partner's responses.

the women was 19.3 and of the men 19.9. Although the "straight-hippie" dimension was not assessed quantitatively, it may be estimated on the bases of dress and hair-style that about 10 percent of the respondents were representatives of the campus hippie culture.

Approximately three-fifths of the respondents reported that they and their partners were "going together," with the remainder split about equally between "dating, but not going together" and "engaged." When there was a discrepancy between the two partners on this report, it was usually the man who made use of the more intense category. This was true in 17 of the 25 cases in which one partner said they were "dating" and the other said they were "going together," and in nine of the 13 cases in which one partner said they were "going together" and the other said they were "engaged." (There were no cases in which one partner reported that the couple was "dating" and the other reported that they were "engaged.") Notice should be also taken of the fact (included in Table 7) that over two-thirds of both the women and the men reported that they and their partners were "in love." Most of the remaining respondents said they were "uncertain" on this point, and only ten percent of the total (virtually all of whom also categorized their relationship as "dating") said they were not "in love." The fact that so large a proportion of the respondents consider themselves to be in love with their partners points up a challenge involved in the use of the love scale: Will the scale enable us to make meaningful distinctions among respondents with respect to their degree of love, in spite of the relative uniformity of their self-categorizations?

Finally, the median length of time that the couples had been dating or going together was 12 months. For non-engaged couples only, the median

length of dating was 11 months, and for engaged couples it was 22.5 months. Among engaged couples, the median length of time that they had been engaged was 3.5 months.

Internal Scale Analysis

Because it was anticipated that the responses of members of engaged couples to individual love-scale and liking-scale items would be concentrated at the upper limits, all internal scale analyses were based on the responses of the 158 non-engaged couples. Each item was scored on a scale ranging from 1 to 9, by dividing the 15-centimeter response continuum into nine equal intervals. Total scale scores were obtained by summing the scores on the 13 component items. On the whole, the attempt to build two internally consistent and mutually discriminable scales was successful. The values of coefficient alpha for the love scale were .844 for women and .857 for men. For the liking scale, the values of coefficient alpha were slightly lower-- .807 for women and .826 for men. These estimates of internal consistency are, as desired, considerably higher than the inter-scale correlations (to be discussed later) of .391 for women and .600 for men.

Inspection of the item-scale correlations presented in the first part of Table 8 indicates that for women, 10 of the 13 love-scale items had corrected item-scale correlations of .40 or more, and that for men, 11 of the 13 items had corrected item-scale correlations (i.e., correlations with the total scale score minus the item itself) of .40 or more. For women, one of the love items had a correlation of over .40 with the liking index, and for men there were four such items. There was only one love-scale item which correlated more highly (and this was the case for

TABLE 8

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS WITH TOTAL SCALE SCORES
OF LOVE-SCALE AND LIKING-SCALE ITEMS

LOVE-SCALE ITEMS	WOMEN				MEN			
	\bar{X}	SD	r* Love	r Like	\bar{X}	SD	r* Love	r Like
1. If ___ were feeling badly, my first duty would be to cheer him (her) up.	7.56	1.79	.393	.335	7.28	1.67	.432	.304
2. I feel that I can confide in ___ about virtually everything.	7.77	1.73	.524	.274	7.80	1.65	.425	.408
3. I find it easy to ignore ___'s faults.	5.83	1.90	.184	.436	5.61	2.13	.248	.428
4. I would do almost anything for ___.	7.15	2.03	.630	.341	7.35	1.83	.724	.530
5. I feel very possessive toward ___.	6.26	2.36	.438	-.005	6.24	2.33	.481	.342
6. If I could never be with ___, I would feel miserable.	6.52	2.43	.633	.276	6.58	2.26	.699	.422
7. If I were lonely, my first thought would be to seek ___ out.	7.90	1.72	.555	.204	7.75	1.54	.546	.328
8. One of my primary concerns is ___'s welfare.	7.47	1.62	.606	.218	7.59	1.56	.683	.290
9. I would forgive ___ for practically anything.	6.77	2.03	.551	.185	6.54	2.05	.394	.237
10. I feel responsible for ___'s well-being.	6.35	2.25	.582	.178	6.67	1.88	.548	.307
11. When I am with ___, I spend a good deal of time just looking at him (her).	5.42	2.36	.271	.137	5.94	2.18	.491	.318
12. I would greatly enjoy being confided in by ___.	8.35	1.14	.498	.292	7.88	1.47	.513	.383
13. It would be hard for me to get along without ___.	6.27	2.54	.676	.254	6.19	2.16	.663	.464
Love-Scale Total	89.46	15.54			89.37	15.16		

*Correlation between item and love-scale total minus that item.

(Continued)

TABLE 8 (Continued)

LIKING-SCALE ITEMS	WOMEN				MEN			
	\bar{X}	SD	r Love	r* Like	\bar{X}	SD	r Love	r* Like
1. When I am with ____, we are almost always in the same mood.	5.51	1.72	.163	.270	5.30	1.77	.235	.294
2. I think that ____ is unusually well-adjusted.	6.36	2.07	.093	.452	6.04	1.98	.339	.610
3. I would highly recommend ____ for a responsible job.	7.87	1.77	.199	.370	7.90	1.55	.281	.422
4. In my opinion, ____ is an exceptionally mature person.	6.72	1.93	.190	.559	6.40	2.00	.372	.609
5. I have great confidence in ____'s good judgment.	7.37	1.59	.310	.538	6.68	1.80	.381	.562
6. Most people would react very favorably to ____ after a brief acquaintance.	7.08	2.00	.167	.366	7.32	1.73	.202	.287
7. I think that ____ and I are quite similar to each other.	6.12	2.24	.292	.410	5.94	2.14	.407	.417
8. I would vote for ____ in a class or group election.	7.29	2.00	.057	.381	6.28	2.36	.299	.297
9. I think that ____ is one of those people who quickly wins respect.	7.11	1.67	.182	.588	6.71	1.69	.370	.669
10. I feel that ____ is an extremely intelligent person.	8.04	1.42	.193	.155	7.48	1.50	.377	.415
11. ____ is one of the most likable people I know.	6.99	1.98	.346	.402	7.33	1.63	.438	.514
12. ____ is the sort of person whom I myself would like to be.	5.50	2.00	.253	.340	4.71	2.26	.417	.552
13. It seems to me that it is very easy for ____ to gain admiration.	6.71	1.87	.176	.528	6.53	1.64	.345	.519
Liking-Scale Total	88.48	13.40			84.65	13.81		

*Correlation between item and liking-scale total minus that item.

Note.--Based on lover responses of 158 non-engaged couples. Scores on individual items can range from 1 to 9, with 9 always indicating the positive end of the continuum.

both sexes) with the total liking score than with the total love score. This was Item 3: "I find it easy to ignore ____'s faults." It will be recalled that this is one of the two ad lib items added to the love-scale after the preliminary investigation had been completed. In retrospect, I am prepared to admit that the inclusion of this item may have been due to my stubbornly sentimental desire to retain the notion of "idealization" as a component of romantic love. In fact, this item is not intimately related to any of the three postulated components of the loving attitude (affiliative and dependent need, predisposition to help, and exclusiveness-absorption). In future versions of the love scale it will, of course, be omitted. The other ad lib item, "I feel that I can confide in ____ about virtually everything," fared relatively well for women. Among men, however, it was a poor discriminator, correlating almost as highly with the index of liking as with the index of love. This item may also be dropped from future versions. Whether or not these failures will restrain me from future "ad libbing" remains to be seen.

Turning to the second portion of Table 8, it will be observed that the liking item-scale correlations are somewhat lower than the love item-scale correlations, corresponding to the somewhat lower values of coefficient alpha reported earlier. In two cases, the correlation between a liking item and the love scale was higher than its corrected correlation with the liking scale. These were Item 10, "I feel that ____ is an extremely intelligent person" (for women only), and Item 8, "I would vote for ____ in a class or group election" (for men only). In addition, for men only, Item 7 ("I think that ____ and I are quite similar to one another") had virtually identical correlations with the two scale scores. At least one of the inappropriate correlational patterns, that of the item concerning

perceived intelligence (for women) may be attributed in part to a ceiling effect. The mean score on this item for women was 8.04 (on a scale ranging from 1 to 9), which was the highest among the items, and its standard deviation of 1.42 was the lowest among the items. It seems that virtually all women in the sample consider their boyfriends to be "extremely intelligent," a view which, even though it is probably erroneous, may at least have the effect of bolstering male egos. The minimal variability of women's responses to this item may have restricted the magnitude of its correlations with both of the total scale scores.

Comparisons between women's and men's mean scores on the love and liking scales reveal that women love their boyfriends almost exactly as much as men love their girlfriends (the love-scale means are 89.46 and 89.37 respectively), but that women like their boyfriends considerably more than men like their girlfriends. The mean liking-scale scores are 88.48 for women and 84.65 for men (t for matched pairs is 2.95, $df = 157$, $p < .01$, 2-tailed). Inspection of the individual item means presented in Table 8 reveal only slight sex differences on the love-scale items. The greater liking of women for men than of men for women is reflected by differences in that direction on 10 of the 13 liking-scale items. The largest mean differences were obtained for Item 8 ("I would vote for ___ in a class or group election"), Item 12 ("___ is the sort of person whom I myself would like to be"), Item 5 ("I have great confidence in ___'s good judgment"), and Item 10 ("I feel that ___ is an extremely intelligent person"). These differences suggest that, for better or worse, the concept of "liking" employed in the present research is not free from certain sex-role connotations. To be "likable," one must be competent and intelligent--the sort of person one would like to see in public office.

And it is well-known that most office-holders are men, not women. It is encouraging, however, that the main object of psychometric interest in the present research, the love scale, seems (at least on the basis of comparisons of item means) to be free of such confounding with sex-role expectations.

Some Differences Between Men and Women

Before turning to an examination of the intercorrelations among major variables, it will be worthwhile to inspect the mean scores on some of these variables, paying particular attention to sex differences and to differences between engaged and non-engaged respondents. These data are presented in Table 9. As already reported, the mean love scores are virtually identical for the two sexes, but the liking scores are higher for women than for men. These relationships hold for engaged as well as for non-engaged respondents, but the means are all displaced upwards for the engaged respondents. A complementary pattern of means was found for the measures of perceived love and liking. That is, the perceived love scores of women and men are about equal, but the perceived liking scores of men are higher than those of women. It may also be seen, however, that engaged (but not non-engaged) respondents, tend to overestimate to some extent their partners' love for them. Moreover, both non-engaged and engaged women (but not men) tend to underestimate their partners' liking for them.

This pattern of distortions seems to be interpretable in terms of a tendency for perceptions of love and liking to be more closely in accord with role expectations than is the case for actual love and liking. Thus, the love scores of engaged persons, for whom love is normative in Western

TABLE 9

MEANS AND STANDARD DEVIATIONS OF MAJOR INDIVIDUAL VARIABLES AS A
FUNCTION OF SEX AND ENGAGED OR NON-ENGAGED STATUS

	NON-ENGAGED COUPLES (N=158 couples)				ENGAGED COUPLES ^a (N=24 couples)			
	WOMEN		MEN		WOMEN		MEN	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Love	89.46	15.54	89.37	15.16	97.88	8.54	97.50	10.33
Liking	88.48	13.40	84.65	13.81	93.25	9.87	89.58	10.51
Perceived love	88.09	19.74	90.79	15.74	101.42	10.22	100.58	9.54
Perceived liking	82.80	15.35	88.22	12.43	84.50	13.54	93.83	9.95
Friend-love	65.27	17.84	55.07	16.08	61.58	12.82	50.54	18.51
Friend-liking	80.47	16.47	79.10	18.07	78.54	13.86	73.67	15.24
Marriage prob. ^b	5.49	3.16	4.94	3.09	(9.00 .00)		(9.00 .00)	
Romanticism	5.02	1.86	5.75	1.70	5.29	1.73	5.96	1.43

- a. For a couple to be categorized as "engaged," both partners had to report that they were engaged, and both had to estimate their probability of marriage as 91-100%.
- b. Responses to question, "What is your best estimate of the likelihood that you and _____ will marry one another?" Scale ranges from 0 (0-10% probability) to 9 (91-100% probability).

society, are considerably higher than the love scores of non-engaged persons, but this excess is even greater with respect to perceived love scores. The tendency for women to underestimate the degree to which their boyfriends like them may also reflect such a tendency for perceived attraction to be more sensitive than actual attraction to role expectations. As previously noted, several of the liking items seem to have sex-specific connotations. It has been observed (Komarovsky, 1946) that American women sometimes try to appear less intelligent and competent than they really are, in order to avoid impinging upon their boyfriends' (or prospective boyfriends') illusions of intellectual and task-related superiority.

Whether or not it is contrived, the women in our sample apparently do create such an impression, as reflected by the fact that they are "liked" less than they are loved by their boyfriends (and, also, less than they themselves "like" their boyfriends). But it also seems that women, particularly those who are engaged, perceive this gap between their boyfriends' love and liking for them to be greater than it really is, suggesting that they may take this sort of sex-role expectation more seriously than their boyfriends do.

Moving on to the measures of attraction toward one's same-sex friend, it was found, as expected, that such friends are liked considerably more than they are loved. In addition, the data reveal that although men and women like their same-sex friends to about the same extent, women tend to love their same-sex friends more than men do. This result is clearly in accord with cultural stereotypes concerning male and female friendships. It is permissible, for example, for girlfriends to kiss one another and to speak of themselves as "loving" one another, whereas such behaviors among male friends are likely to be seen as reflecting homosexuality. It has also been reported (Jourard & Lasakow, 1958) that females tend to confide more in same-sex friends than do males.

A particularly interesting finding is that women's estimates of the likelihood that they would marry their partners tended to be greater than those of men. This difference is revealed in the means presented in Table 9, but is shown more clearly by the following intra-couple pattern: In 74 couples the woman's estimate was higher than the man's, in 47 couples the estimates were identical (not including the 24 engaged couples, among whom all estimates, by definition, were 91-100%), and in only 36 couples was the man's estimate higher than the woman's. The 74:36 ratio of

woman-higher to man-higher couples is significantly different from the chance expectation of an equal split ($\chi^2 = 12.44, p < .01$). This difference contrasts with the previously reported finding that in the relatively few cases in which the two partners disagreed about whether they were "dating," "going together," or "engaged," it was usually the man who made use of the more intense category. It seems that women, true to their reputation as the aggressive sex with respect to marriage, are more confident than their boyfriends that their present relationship will lead them to the altar. In borderline cases, however, they tend to be more cautious than men in their use of the labels "going together" and "engaged" to describe their relationship. Perhaps this caution represents a hedge against the possibility that their expectations of marriage will not be fulfilled.

Table 9 also reveals that among both non-engaged and engaged respondents men tended to obtain higher scores than women on the scale of romanticism (for the combined sample, $t = 3.89, df = 361, p < .01, 2$ -tailed). This finding is in accord with previous reports (Hobart, 1958; Knox & Sporakowski, 1968), and it will be considered in greater detail in the next chapter.

Intercorrelations Among Major Variables

In Table 10 the intercorrelations among the measures of love, liking, perceived love, perceived liking, friend-love (i.e., love for one's same-sex friend), friend-liking, "in-loveness" ("Would you say that you and ___ are in love?"),² estimated marriage probability, romanticism,

²Responses to this question were scored on a three-point scale ("No" = 0, "Uncertain" = 1, and "Yes" = 2).

social desirability (Marlowe-Crowne scale), and length of dating are presented for the 158 non-engaged couples, separately for women and for men. Before reading on, therefore, the reader is encouraged to try to avoid being corrupted by my guidance by taking a long look at Table 10.

It will be observed, first of all, that with one major exception, the patterns of correlations for women and for men are quite similar. The exceptional finding is one that has already been reported. The correlation between the love scale and the liking scale is considerably higher for men ($r=.600$) than for women ($r=.391$) (z for this difference is 2.48, $p < .02$, 2-tailed). These values are virtually identical to those obtained with the 11-item score indices of love and liking constructed from the preliminary questionnaire (see Chapter 2, p. 43). The implications of this sex difference may be considered from two different perspectives. First, from a purely psychometric vantage point, the difference can be accounted for at least in part by the fact that approximately two-thirds of the respondents completing the preliminary versions of the love and liking scales were women. It is reasonable, therefore, that the result of the factor analytic procedures employed would be a pair of scales which are relatively independent (as desired) for women, but less independent for men.

Since the factor analytic procedures were used in a purely advisory way, however, this retrospective explanation is not necessarily damaging to the construct validity of the scales. The major issue to be considered is whether it is, in fact, reasonable for measures of "love" and of "liking" for one's boyfriend or girlfriend to be more highly correlated for men than for women. It may be suggested, for example, that women's attitudes toward their dating partners are more highly differentiated

TABLE 10
INTERCORRELATIONS AMONG MAJOR INDIVIDUAL VARIABLES

	WOMEN									
	Love 1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
2. Liking	391									
3. Perceived Love	654	378								
4. Perceived Liking	339	558	583							
5. Friend-Love	183	050	279	199						
6. Friend-Liking	123	173	114	314	473					
7. "In-Loveness"	589	279	417	254	-006	070				
8. Marriage prob.	588	316	475	295	-127	007	652			
9. Romanticism	155	018	125	-005	029	030	117	293		
10. Marlowe-Crowne	-010	120	100	204	094	211	018	036	-048	
11. Dating length ^a	159	009	082	-017	-102	-011	271	459	145	-046

	MEN									
	Love 1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
2. Liking	600									
3. Perceived Love	604	327								
4. Perceived Liking	324	509	445							
5. Friend-Love	151	075	116	082						
6. Friend-Liking	204	129	117	197	512					
7. "In-loviness"	523	352	493	203	020	099				
8. Marriage prob.	590	354	499	202	-021	062	621			
9. Romanticism	205	075	125	211	016	-013	007	175		
10. Marlowe-Crowne	-007	-001	-049	103	-050	048	-040	139	125	
11. Dating length ^a	035	-030	165	-070	-198	-085	220	381	162	039

Note.--Based on responses of 158 non-engaged couples. Decimal points are omitted. With an N of 158, a correlation of .159 is significant at the .05 level and a correlation of .208 is significant at the .01 level (2-tailed values).

a. The correlation between the two partner's reports of the length of time they had been dating was .967. For the purposes of the correlational analysis, "dating length" was arbitrarily equated with the women's estimates.

than those of men. That is, it may be relatively common for a woman to "love" her boyfriend without "liking" him, or vice-versa, whereas men may tend to respond to their girlfriends in a more univocal way. There is at least suggestive empirical support for the notion that women do, in fact, discriminate more sharply between love and liking than do men. Banta and Hetherington (1963) obtained scores on the Edwards Personal Preference Schedule for groups of six students, with each group consisting of an engaged couple and a female and male friend of each of the fiancés. They found that the personality profiles of the female fiancée and of the female friend of the male fiancé tended to be similar to one another. The profiles of the male fiancé and of the male friend of the female fiancée, on the other hand, tended to be dissimilar from one another. It seemed, in other words, that men had a tendency to choose the same sorts of women as friends and as fiancées, whereas women tended to choose different sorts of men as friends and as fiancés. This suggestion of greater discrimination between classes of objects (friends and fiancés) on the part of women is, of course, on a different level from the suggestion that women's attitudes toward a single class of objects (boyfriends) are more highly differentiated than the corresponding attitudes of men. But the two suggestions do seem to jibe with one another. It may be that women tend to love and to like different sorts of people, and also tend to distinguish the two components of their attraction toward a particular person. Men, on the other hand, may be less likely to make either of these distinctions.

Table 10 also reveals that the greater independence of love and liking among women than among men is characteristic only of attitudes toward dating partners. The correlations between love and liking for one's

same-sex friend are approximately the same for the two sexes. Moreover, the correlation between perceived love and perceived liking is greater among women than among men ($\underline{r} = .583$ for women and $.445$ for men, $\underline{z} = 1.67$, $\underline{p} < .10$, 2-tailed), accurately mirroring the actual state of affairs.

Now let us turn our attention from the relationships between love and liking to the relationships between responses on the different administrations of the love and liking scales. Sizable correlations were obtained between the measure of love and the measure of perceived love ($\underline{r} = .654$ for women and $.604$ for men) and between the measures of liking and perceived liking ($\underline{r} = .558$ for women and $.509$ for men). These indices of perceived similarity of love and of liking are in all cases higher than the corresponding cross-scale correlations (i.e., love with perceived liking and liking with perceived love). It seems that both women and men believe that both love and liking are rather highly symmetrical. The extent to which these beliefs are accurate will be considered at a later point in this chapter.

The correlations between love and liking for one's dating partner and love and liking for one's same-sex friend (i.e., the same-scale-cross-target correlations) are all positive, but of low magnitude. The largest of these four correlations, that between women's love for their boyfriends and their same-sex friends, is only $.183$. (The correlation between men's love for their girlfriends and their liking for their same-sex friends is slightly higher than any of the same-scale-cross-target correlations ($\underline{r} = .204$.) The low magnitude of these cross-target correlations (in comparison, for example, to the cross-scale-same-target correlations reported above) clearly indicates that the attempt to build scales which

would reflect attitudes toward a particular object, rather than more general interpersonal attitudes, was successful. These low correlations also help to reassure us that the variance of love and liking scores cannot be accounted for to any large extent by individual differences in the tendency to make use of the extremes of rating scales (cf. Hamilton, 1968). Another reassuring result with respect to the potentially biasing effects of general response styles is that the correlations between the love and liking scales and the Marlowe-Crowne Social Desirability Scale are negligible. The only significant correlations between the Marlowe-Crowne Scale and other measures involved women's perceived liking ($r = .204$) and women's liking for their same-sex friends ($r = .211$). To the extent that Marlowe-Crowne scores are deemed to be valid in this respect, therefore, it may be concluded that the variance of love and liking scores is not controlled appreciably by individual differences in the tendency to present oneself in a socially desirable manner.

The two variables that were most highly correlated with the love scale, for both men and women, were "in-loveness" (responses to the question, "Would you say that you and ____ are in love?") and marriage probability (the respondents' estimates of the likelihood that they would marry their partners). As I had hoped, both of these measures were considerably more highly related to love scores than to liking scores. On the basis of theory and data which had suggested to me that love and the prospect of marriage are more intimately connected with one another among women than among men (e.g., Kephart, 1967), I had expected the correlation between love and marriage probability to be higher among women. This was not the case, however. The two correlations were identical

($r = .588$ for women and $.590$ for men).³ Although the relationships between love and marriage probability and between love and "in-loveness" were relatively strong the relationship between marriage probability and "in-loveness" was even stronger ($r = .652$ for women and $.621$ for men).

These correlations between marriage probability and "in-loveness" seem surprisingly high, especially when it is recalled that the measure of "in-loveness" employed a three-point scale with a highly skewed distribution of scores. This result suggests that dating partners' perceptions of whether or not they are "in love" might best be considered to be a "quasi-demographic" variable, somewhat analogous to the "dating"- "going together"- "engaged" dimension, in that it reflects rather directly the respondents' perceptions of how close they are to marriage. By virtue of its high correlation with marriage probability, scores on the love scale may also be regarded as having such a quasi-demographic status to some extent. Since this correlation is not highly constrained by characteristics of the score distributions, however, it is clear that love scores are not determined by marriage probability (or vice-versa) to as great an extent as is the case for the ratings of "in-loveness."

The conceptual distinction between love (as measured by the love-scale) and "in-loveness" may be illuminated by examining the correlations

³I now believe that this prediction was misguided. The message of the theory and data on this point actually pertains to causal direction. There is some evidence in support of the proposition that (to overstate the point) for the male in our society it is love which leads to marriage, whereas for the female it is the prospect of marriage which engenders love. This analysis does not imply, however, that the magnitude of the correlation between love and marriage probability should be greater for one sex or the other. Further consideration of the contrasting orientations of women and men toward love and marriage will be found in the next chapter, in conjunction with our discussion of romanticism.

between each of these variables and the length of time that the couple has been dating. The correlation between "in-loveness" and length of dating is .271 for women and .220 for men. Neither of these correlations is as great as the relationship between marriage probability and length of dating ($r = .459$ for women and $.381$ for men). In spite of the restricted distribution of "in-loveness" scores, however, these correlations are higher than the correlations between love and length of dating ($r = .159$ for women and $.035$ for men). In the next chapter it will be shown that the latter relationship is non-linear and that, moreover, the shape of the function relating love and length of dating depends upon certain other characteristics of the couples. For the present, we may conclude that scores on the love scale and responses to the question "Would you say that you and ___ are in love?" share a fairly large amount of common variance. Nevertheless, the two variables are by no means redundant. The former is primarily an attitudinal measure, reflecting one's thoughts, feelings, and predispositions with respect to one's dating partner, while the latter is primarily a "quasi-demographic" variable, corresponding rather closely to perceptions of closeness to marriage. Moreover, love is viewed as a continuous dimension, whereas "in-loveness" seems to be inherently dichotomous.

Before leaving Table 10 it will be worthwhile to note the fact that respondents' scores on the scale of romanticism were positively related at a significant (or near-significant) level to both love and marriage probability among both women and men. It appears that among both sexes there is at least some tendency for people who believe, in effect, that "Love conquers all" to love their present boyfriends and girlfriends more and to consider it more likely that they will marry them than people who

do not hold this belief. In the next chapter the relationships among romanticism, marriage probability, and love will be explored in greater detail.

TABLE 11
INTRA-COUPLE CORRELATIONS FOR SELECTED VARIABLES

Variable	r
Love	.418 **
Liking	.282 **
"In-loveness"	.584 **
Marriage probability	.682 **
Romanticism	.141 *
Marlowe-Crowne	.234 **
F-Scale	.511 **

Note.--Based on responses of 158 non-engaged couples.
* $p < .05$ (1-tailed)
** $p < .005$ (1-tailed)

Intra-Couple Correlations

Table 11 presents the intra-couple correlations (i.e., the correlation across couples between the scores of girlfriends and those of their boyfriends) of seven of the measured variables. The values in the first four rows of the table indicate that there is a relatively large amount of cross-couple symmetry with respect to estimates of marriage probability, and progressively decreasing amounts of symmetry with respect to "in-loveness," love, and liking. With one exception, all of these correlations are larger than any of the intra-couple-cross-measure correlations involving the same variables. For example, the intra-couple correlation between women's love and men's liking is .132, and the correlation between

women's liking and men's love is .225. The one exception is the intra-couple correlation between women's love and men's marriage probability, whose value of .417 is almost identical to the intra-couple love-love correlation. The correlation between men's love and women's marriage probability is .370.

The values in the bottom three rows of Table 11 indicate that there is some degree of similarity between girlfriends and boyfriends with respect to their scores on the romanticism and Marlowe-Crowne scales, and a particularly high degree of similarity ($\underline{r} = .511$) with respect to their scores on the F-Scale. The latter result is of special interest in light of the large amount of attention which has been paid to the role of attitudinal similarity in research on both friendship and mate-selection (e.g., Newcomb, 1961; Coombs, 1966; Kerckhoff & Davis, 1962). At least two explanations for such similarity come to mind. Dating partners may either select one another on the basis of similar ideology, or they may become more similar ideologically as a result of interaction with one another. Since the data at hand were collected at only one point in time, they are not ideally suited for choosing between these interpretations. There is some evidence, nevertheless, that the selection hypothesis is the more accurate. When the couples (including, in this instance, the 24 engaged couples) were categorized in terms of their length of dating, the intra-couple correlations with respect to F-Scale scores were relatively invariant across categories. For couples who had been dating less than four months the intra-couple correlation was .575, for those who had been dating four to 11 months it was .474, for those who had been dating 12 to 17 months it was .568, and for those who had been dating 18 months or more it was .526. If couples became more similar

with respect to authoritarian attitudes as a result of interaction, we would expect the intra-couple correlation to increase as a direct function of the length of dating. Since the value of this correlation appears to be quite stable, however, it seems more reasonable to conclude that the authoritarian dimension plays a significant role in the initial assortment of dating partners.

The Perception of Love and Liking

In his important paper on "Social Preference and Its Perception," Tagiuri (1958) maintains that "Other things being equal, when the role differentiation in a group is not too great, the category of like and dislike 'packages' most of the determinants of interaction. Consequently, it is reasonable to assume that the evaluation of such attitudes of others toward oneself must be a basic aspect of the interpersonal activity of an individual" (p. 317). In the case of dating relationships, a major premise of the present research is that the degree of love, as well as of liking, held by each individual toward his partner is an important determinant of interaction. It is of considerable interest, therefore, to investigate respondents' perceptions of their partners' love and liking for them, and, in particular, the extent to which these perceptions are accurate.

The questionnaire measures obtained from the two members of each couple facilitate certain inferences along these lines. In addition to completing the love and liking scales with respect to his dating partner, each respondent also completed the scales as he thought his partner felt about him. By comparing a respondent's perceived love and liking scores with the love and liking scores of his partner, it is possible to assess

the extent to which his perceptions are accurate. One possible way to begin such an analysis would be to compute difference scores for each respondent, with each such score representing the absolute difference between his perceived love or liking score and his partner's actual love or liking score. The use of such a dyadic measure involves several methodological pitfalls, however (cf. Cronbach, 1958). Instead, the analysis to be presented will be correlational, with accuracy for a given subgroup of respondents defined in terms of the intra-couple correlation between respondents' perceived love or liking scores and their partners' actual love or liking scores.

This procedure is not without its own methodological pitfalls. For one thing, it tends to mask any non-linear relationships between perception and reality. In addition, it may give rise to misleading conclusions if the means and variances of the measures being correlated are not relatively homogeneous across the subgroups of respondents being compared. Inspection of the raw data suggests, however, that the possibility of such artifacts in the analyses to be presented is not great. The means and variances of the measures of love, liking, perceived love, and perceived liking for both women and men, as presented in Table 9, are relatively homogeneous. Moreover, the zero-order correlations between these measures and the categorizing measure to be employed, F-Scale scores, are all non-significant.

Another methodological complication encountered in the correlational assessment of perceptual accuracy results from the facts that: 1. People tend to believe that their love and liking for their partners is reciprocated, and 2. There is, in fact, a relatively large degree of reciprocity of love and liking. "Accuracy," therefore, may be a consequence of

the joint effects of perceived similarity and actual similarity. It is not clear that estimates of accuracy which are influenced by these tendencies toward perceived similarity and actual similarity are invalid. If a person feels that his partner loves him about as much as he loves his partner, and if this judgment is correct, his estimate may indeed be considered to be "accurate." It is also possible, however, to assess accuracy independently of perceived similarity and actual similarity by means of the technique of partial correlation. This procedure involves the partialling out of the effects of the respondent's own love or liking from the correlation between his perceived love or liking score and his partner's actual love or liking for him. In the table which follows, two estimates of accuracy will be presented. The first ("Accuracy") is the zero-order correlation between the respondents' perceived love or liking and their partners' actual love or liking, and the second ("Corrected Accuracy") is the value of this correlation after the effects of the respondents' own love or liking have been partialled out.

The major reason for including a version of the F-Scale in the questionnaire was the expectation that authoritarianism would be related to perceptual accuracy. Specifically, several investigators have postulated that authoritarian individuals lack sensitivity to the characteristics of others, and, therefore, should be less accurate than non-authoritarians in their social perception. Most of the research which has been conducted to test this hypothesis has involved the prediction of other people's responses on the F-Scale itself. As Kirscht and Dillehay (1967) point out in their review of the literature on authoritarianism, this procedure is singularly unsuited for the assessment of the relative accuracy of authoritarians and non-authoritarians. Kirscht and Dillehay conclude that there

is, in fact, virtually no evidence relevant to the hypothesis. One exception is Newcomb's finding (1961, 1963) of a significant inverse relationship between authoritarianism and accuracy of prediction of the Spranger values of one's peers. This relationship was found only during the later stages of acquaintance.

In the present investigation it was predicted that respondents who obtained high scores on the F-Scale would be less accurate in their estimates of their partners' love and liking for them than would respondents who obtained low scores on the F-Scale. Since the mean and median F-Scale scores were virtually identical for the two sexes, the same cutting points were used to categorize respondents of both sexes as Low, Medium, or High F (see note to Table 12). The right-hand columns in each portion of Table 12, referring to the total sample of non-engaged women and men, indicate that on the whole respondents' accuracy with respect to love and with respect to liking is about equal. This is especially clear when we refer to the corrected accuracy indices. Since the actual intra-couple similarity with respect to love is somewhat greater than actual similarity with respect to liking, the uncorrected indices of accuracy are somewhat greater for love than for liking. These indices also suggest that women and men are about equally accurate in their perceptions of their partners' love and liking for them.

None of the indices of accuracy for the female Low, Medium, and High F subgroups differ significantly from another. Thus the hypothesis that authoritarians would prove to be less accurate than non-authoritarians is not confirmed among women. Among the men, there is a slight tendency for the corrected love accuracy index to be higher among the High F subgroup than among the Low F subgroup. The direction of this difference is, of

TABLE 12

ACCURACY, PERCEIVED SIMILARITY, AND ACTUAL SIMILARITY OF LOVE AND
 LIKING AS A FUNCTION OF SEX AND LEVEL OF AUTHORITARIANISM

	WOMEN				MEN			
	Low F (N=48)	Med. F (N=61)	High F (N=49)	All (N=158)	Low F (N=60)	Med. F (N=41)	High F (N=57)	All (N=158)
Love accuracy ^a	<u>.617</u>	<u>.579</u>	<u>.652</u>	<u>.622</u>	<u>.525</u>	<u>.631</u>	<u>.571</u>	<u>.571</u>
Perceived love similarity ^b	.778	.587	.586	.654	.637	.628	.559	.604
Actual love similarity ^c	.450	.444	.319	.418	.511	.497	.248	.418
Corrected love accuracy ^d	<u>.476</u>	<u>.439</u>	<u>.606</u>	<u>.507</u>	<u>.301</u>	<u>.472</u>	<u>.538</u>	<u>.440</u>
Liking accuracy ^a	<u>.625</u>	<u>.454</u>	<u>.510</u>	<u>.526</u>	<u>.700</u>	<u>.316</u>	<u>.400</u>	<u>.515</u>
Perceived liking similarity ^b	.698	.563	.427	.558	.639	.509	.376	.509
Actual liking similarity ^c	.422	.290	.146	.282	.467	.046	.197	.282
Corrected liking accuracy ^d	<u>.509</u>	<u>.368</u>	<u>.500</u>	<u>.463</u>	<u>.590</u>	<u>.340</u>	<u>.359</u>	<u>.450</u>

Note.--Based on responses of 158 non-engaged couples. Low F's scores 27 or less on the scale employed (Athanasίου, 1968), Medium F's scored 28 to 42, and High F's scores 43 or more.

If we call the respondent's perceived love (or liking) Variable 1, his partner's love (or liking) Variable 2, and his own love (or liking) Variable 3, then:

- a. Accuracy = r_{12}
- b. Perceived similarity = r_{13}
- c. Actual similarity = r_{23}
- d. Corrected accuracy = $r_{12.3}$

course, opposite to that predicted. Since this difference is within the limits of chance variation, however ($\underline{z} = 1.53$, $p < .13$, 2-tailed), it is perhaps best not to linger on it. On the other hand, the uncorrected liking accuracy index is significantly greater among the Low F men than among the High F men ($\underline{z} = 2.34$, $p < .02$, 2-tailed). This difference is in the predicted direction, and thus provides support for the ascription of greater perceptual accuracy to non-authoritarians. It will be noted that the uncorrected liking accuracy index is lowest among the Medium F men. It appears, therefore, that the differential liking accuracy among men can most appropriately be explained in terms of the notion that Low F's are particularly accurate, rather than the notion that High F's are particularly inaccurate. When the effect of their own liking scores is partialled from the men's liking accuracy indices, however, the difference between Low F's and High F's fails to attain significance ($\underline{z} = 1.59$, $p < .12$, 2-tailed).

All in all, the correlational results presented in Table 12 provide rather limited support for the hypothesis that non-authoritarians are more accurate than authoritarians in their perceptions of their dating partners' attitudes toward them. In only one of four cases (that of men's liking accuracy) was the evidence in line with the prediction. The Monday-morning quarterback might assert that the prediction really should have been focused upon men's (rather than women's) accuracy. The great majority of investigations employing the F-Scale have employed male subjects, and the nature of the "female authoritarian syndrome" remains relatively obscure. A post facto explanation for the apparent tendency of non-authoritarian men to be more accurate than authoritarian men only with respect to their partners' liking for them, and not with respect to their

love, has thus far eluded the grasp of this Monday-morning quarterback, however.

It should be pointed out, finally, that the High F's as well as the Low F's in the present sample must be considered to be low in authoritarianism in comparison to the general population, and even in comparison to the population of college students. Athanasiou (1968), whose version of the F-Scale was employed in the present research, reported a mean authoritarianism score of 58.7 for a sample of male engineering students at the University of Michigan, and a mean score of 49.7 for a sample of men who transferred out of engineering. In the present sample, the mean score was 36.0 for women and 36.8 for men. It is, apparently, a characteristic of the non-authoritarian personality to be interested in taking part in research concerned with dating relationships.

Summary: The Love Scale in Action

In this chapter I have reported the procedures and major results of a questionnaire study of 182 student dating couples. The questionnaire measured a total of about 30 variables, not including individual scale items. One of these variables was of considerably greater importance than the other 29. This is the variable which has been named "love." It is only by means of examining the relationships between love and the other 29 variables, however, that the nature of this construct will be understood.

The internal scale analyses presented in this chapter indicated that, on the whole, the attempt to build internally consistent but mutually distinct scales of love and of liking was successful. The single love-scale item which correlated more highly with the liking index than with the love index ("I find it easy to ignore ____'s faults") appeared, in retrospect,

to be only tangentially relevant to the conception of love embodied in the love scale (which is seen as including components of affiliative and dependent need, the predisposition to help, and exclusiveness-absorption). Comparison of the mean scores of women and men suggested that, unlike the conception of liking adopted in this research, the conception of love is relatively free of sex-specific connotations. Correlational analysis revealed, however, that love and liking tend to be sharply distinguished from one another by women than by men.

A distinction was drawn between the variables of love (as measured by the love scale) and "in-loveness" (the belief that one is "in love" with his partner). The former is considered to be an attitudinal variable, whereas the latter was categorized as a "quasi-demographic" variable, corresponding rather closely to one's perception of his closeness to marriage. One piece of evidence presented in support of this conceptual distinction was that estimated marriage probability and "in-loveness" were both significantly related to the length of time that the couple had been dating, but love was not. On the basis of intra-couple correlations it was reported that love tends to be mutual. The correlation between girlfriends' and their boyfriends' love was .418. Love appears to be somewhat more mutual than liking (with respect to which the intra-couple r was .282) but less mutual than marriage probability ($r = .682$) and "in-loveness" ($r = .584$). The somewhat greater mutuality of "in-loveness" than of love (in spite of the highly restricted range of the "in-loveness" measure) also seems to be in accord with the attitudinal vs. quasi-demographic distinction. Dating partners are more likely to be in agreement about their marital plans than to be equally attracted to one another.

Respondents were reasonably accurate in their estimates of their

partners' love for them, and this accuracy was still manifest after the debatably artifactual effects of perceived similarity were statistically removed. Accuracy indices with respect to love and with respect to liking were roughly equal. It had been predicted that non-authoritarians would tend to be more accurate than authoritarians in their estimates of their partners' attraction for them. But support for this prediction was obtained only for men's accuracy with respect to liking.

Finally, the meager relationships between love for one's dating partner and love for one's best same-sex friend and between love and scores on the Marlowe-Crowne Social Desirability Scale were interpreted as suggesting that love scores do not tend to be artifactually influenced by general response styles.

CHAPTER IV

QUESTIONNAIRE STUDY: B. THE SOCIAL CONTEXT OF LOVE

It is common knowledge that the cultural norms to which Jews, Protestants, and Catholics are exposed prescribe that marriages should be contracted only within the group; marriages with outsiders are not sanctioned. Among the Jews, for example, intermarriage has traditionally been looked upon with abhorrence. The outmarrying Jew was branded a renegade by the community and was considered dead by his parents, who even sat shiva (a period of mourning for the dead) for him....Moreover, as is well known, members of the clergy are unequivocally opposed to mixed marriages. In fact, the large majority will refuse to perform such a marriage, unless, of course, the other partner converts or agrees to certain stipulations--for example, with regard to the religious training of children. (Mayer, 1961, p. 13)

The strong opposition to interfaith marriage which is shared by members of most religions has also engendered norms against the logical prelude to such marriage, interfaith dating. Although the force of these norms has undoubtedly diminished during the past several decades, they are still clearly in effect. Table 13 reveals, for example, that when the respondents in the present study are categorized as Protestant, Catholic, or Jewish, there is a strong tendency for both members of a couple to belong to the same religion group.

TABLE 13
FREQUENCY OF DIFFERENT RELIGIOUS COMBINATIONS
AMONG TOTAL SAMPLE OF COUPLES

	Man's Religion				Total
	Protestant	Catholic	Jewish	None or other	
<u>Woman's religion</u>					
Protestant	58	14	17	8	97
Catholic	13	14	2	3	32
Jewish	13	2	28	2	45
None or other	4	1	1	2	8
Total	88	31	48	15	182

χ^2 (not including "none or other" category) = 53.23, df = 4, p < .01.

In addition, there is a tendency for the relationships in which the two partners are of the same religion to be of longer duration than those in which the two partners are of different religions. These data are summarized in Table 14. If the intervals employed in Table 14 are converted to a simple four-point scale (to avoid problems created by the skewness of the raw data), the difference in duration between the same-religion and the different-religion relationships is significant ($t = 1.98$, $df = 159$, $p < .05$, 2-tailed).

TABLE 14

NUMBER OF SAME-RELIGION AND DIFFERENT-RELIGION COUPLES AS A FUNCTION OF THE DURATION OF THE RELATIONSHIP

	Length of dating ^a				Total
	0-3 months	4-11 months	12-17 months	18 or more months	
Same religion ^b	18	22	31	39	100
Different religions ^c	17	15	14	15	61
Total	35	37	35	54	161

^aBased on the average of the estimates of the two members of a couple.

^bBoth partners Protestant, both Catholic, or both Jewish.

^cOne partner Protestant and the other Catholic, or one Protestant and the other Jewish, or one Catholic and the other Jewish. Couples in which one or both members were in the "none or other" category are not included in the table.

It is impossible to conclude on the basis of the composition of our volunteer sample that dating relationships among same-religion couples in the larger population (e.g., of Michigan students) are, in fact, longer-lived than those among different-religion couples. It is conceivable, for example, that different-religion couples who have been dating for only a short period of time are particularly likely to volunteer for research

on dating relationships, and/or that different-religion couples who have been dating for a long time are particularly inclined to stay at home. Nevertheless, these data at least hint at the possibility that there is a higher breakup rate among different-religion couples than among same-religion couples. Such a difference, if confirmed by longitudinal data, would provide insight into the nature of the norms regulating interfaith dating.

In this chapter data will be presented concerning the relationships between a couple's "religious symmetry" (i.e., whether the two partners are of the same religion or of different religions) and the degree to which its members love one another. In spite of this specific focus, the results to be presented may serve to illustrate broader principles concerning the relationships between romantic love and the social context in which it is embedded.¹ To set the stage for such a broader view of

¹All of the considerations to be discussed in the following sections may be seen as equally relevant, for example, to dating relationships within and between different socioeconomic strata. In this instance an additional factor, that of the direction of asymmetry (i.e., is the girl dating someone who is above her or below her in status?) takes on particular importance. Much has been written about the pressures upon women to "marry up" with respect to socioeconomic status, and there is at least some evidence that hypergamy is, in fact, more common than hypogamy within middle-class America. Scott (1965) presents a good armchair discussion of these issues, and a more empirically oriented review, as well as relevant demographic data, is provided by Rubin (1968).. Analysis of the present data with respect to the respondents' socioeconomic origins proved to be a blind alley, however. Respondents were divided into low, medium, and high status groups on the basis of the detailed coding of their reports of their fathers' occupations. Contrary to my expectations, there was no systematic assortment of dating partners with respect to these status categories. Even among engaged couples there was no such assortment. I find it hard to believe that socioeconomic status does not govern students' dating choices to at least some extent. I have come to the conclusion, therefore, that the occupational status scores employed are too crude to be useful for this purpose within the college population. In future research of this nature, it would probably be more profitable to obtain reports of parents' education and estimates of fathers' income.

these results, I will devote the next several sections of this chapter to a consideration of some of the functions served by love on both the social-structural and the individual levels.

The Social Functions of Love

Until recently it has been fashionable for sociologists and anthropologists to suppose that romantic love is extremely rare in all societies except our own, and that, consequently, it could not be of substantial social-structural importance. The classic statement of this point of view was made by Linton:

All societies recognize that there are occasional violent emotional attachments between persons of the opposite sex, but our present American culture is practically the only one which has attempted to capitalize on these, and make them the basis for marriage....The hero of the modern American movie is always a romantic lover, just as the hero of the old Arab epic is always an epileptic. A cynic may suspect that in any ordinary population the percentage of individuals with a capacity for romantic love of the Hollywood type was about as large as that of persons able to throw genuine epileptic fits. (Linton, 1936, p. 175)

Within the past decade, however, theoretical attention has been focused upon the social functions of love. William Goode, who was the pioneering figure in this re-orientation, marshalled an impressive array of historical and anthropological evidence to support his contention that love is a "universal psychological potential" (1959). (Goode defined love as "a strong emotional attachment, a cathexis, between adolescents or adults of opposite sexes, with at least the components of sex desire and tenderness." A more precise definition was irrelevant to Goode's concerns, and it seems safe to assume that the conception of love embodied in the present research is in accord with what he was referring to.)

In Goode's view, "The Theoretical Importance of Love" (the title of his 1959 paper) is to be found in the sociocultural patterns which are developed to keep it from disrupting existing social arrangements. He outlined five structural patterns adopted by different societies to serve this purpose, ranging from child marriage (e.g., in India) to informal social control by both elders and peers (e.g., in contemporary Western culture). The need for such arrangements is dictated by the concern felt in practically all societies for marriage to be endogamous with respect to socioeconomic status and ethnicity. Since love may arise, at least in principle, between any two adolescents or young adults of the opposite sex, it becomes necessary for societies to limit the young person's "field of eligibles" by means of one or another set of rules or sanctions.

In the case of contemporary America, where the "love pattern" is positively valued and in which there is formally free choice in mate-selection, empirical studies have pointed to the large role played by parents (and particularly mothers) in directing the courtship of their children (and particularly daughters) (e.g., Bates, 1942; Sussman, 1953). Scott (1965) has provided an insightful analysis of the role of the college sorority in encouraging class and ethnic endogamy. According to Scott, the major function (even though it is frequently unacknowledged) of the sorority is to insure that young women will meet, and hence marry, only young men of the "appropriate" socioeconomic and ethnic background. This function is largely unnecessary at religion- and class-specific schools, where attendance at the school itself provides the required filtering function. In fact, sororities are comparatively rare at such institutions. The structural need for sororities is greatest at large

public universities with heterogeneous enrollments, and it is in such settings that sororities flourish. In such settings, the sorority serves as a mechanism for the remote control of the young women's affairs by the parental generation. Many girls join sororities only because their parents insist that they do so, alumnae recommendations are typically prerequisites to membership, and regulations are fixed by the national association.

Of particular interest in Scott's analysis are the mechanisms by which the sorority girls themselves serve the structurally requisite regulatory function:

The typical arrangement is for each sorority to maintain traditional liaisons with one or more fraternities, matched closely on a basis of ethnicity or class level. Encounters and courtship are facilitated by parties and exchanges between sororities and fraternities, and by the untiring efforts of intermediaries, or "fixer-uppers"...The control achieved in simple or traditional societies by parental arrangement of marriages is achieved in industrial society by these go-betweens, who in the case of the sorority operate within an organization controlled by interested ascriptive groups. The result is largely the same: marriage is timely, its rate is high, and exogamous and hypogamous combinations of partners are avoided. Then too the style and occasions of sorority dating tend to be expensive and time-consuming and this discourages the attentions of poor and low-status men. (Scott, 1965, pp. 525-526)

By means of these and other mechanisms, sororities manage to keep the potentially disruptive forces of misdirected love under control.²

It is also important to note, however, that sororities make no attempt to challenge the value placed upon love in the larger society. Rather, they make use of this value for their own purposes. This is particularly apparent in the rituals which are employed to "sanctify" matrimony:

²See next page for footnote 2.

The sorority subculture, especially as sustained by the alumnae, define all dating encounters as prolegomena to marriage. Housemothers and alumnae do what they can to discourage truly casual and spontaneous dating and to encourage structured and organized involvement. "Pinning" --a pre-engagement relationship signifying reciprocal commitment and sexual prerogative--is solemnized by an elaborate ritual, often involving the participation of many students, witnessed by all the sorority sisters and attended, in its classic form, by a choir of fraternity men singing outside the sorority. This serves to reinforce progress toward engagement at its weakest point and to hinder withdrawal from the "pinned" commitment. (Scott, 1965, pp. 526-527)

Although Scott himself does not stress this point, it seems that in the case of college sororities the "theoretical importance of love" has a positive as well as a negative aspect. That is, love may be put to the service of society, as well as being something which society must keep in check. Such "positive" social functions of love have generally been ignored. (I use the word "positive" to refer to the maintenance of the social system, rather than in any evaluative sense.) Recently, however, Rosenblatt (1967; Coppinger & Rosenblatt, 1968) has employed cross-cultural methodology to investigate the nature of such positive functions.

²Scott's analysis was based primarily on interviews with cooperative sorority and fraternity members, and a limited amount of participant-observation (as a party photographer). His methods were restricted to a large extent by a requirement by the National Panhellenic Council that sorority members not provide information about their organization to researchers. It is worth reporting, therefore, that his major conclusions concerning the role of sororities in promoting endogamy were supported by a survey comparison between members of a Jewish sorority and Jewish dormitory women at the University of Michigan conducted this term by a group of my undergraduate students (Patricia Dwyer, Gay Forburger, Diane Kuehnle, and Martie Silvennoinen). These investigators found that sorority women expressed more objections to interfaith dating and marriage than did independents and that, in addition, parental attitudes and religiosity were significantly correlated with the attitudes of the sorority women but not with those of the independents. It also should be noted that, as Scott acknowledges, the status of sororities on American campuses is at present in flux, and that, in consequence, some of his specific observations may already be outdated.

Rosenblatt began this research by rating the importance of romantic love as a basis for marriage in each of 75 societies, based on anthropological reports found in the Human Relations Area Files. Since they facilitate instructive comparisons between societal and individual approaches to romantic love, I will summarize the criteria employed for these ratings (Rosenblatt, 1967, p. 475):

1. Idealization of potential spouse, particularly idealization of traits not directly related to capacity to satisfy material needs.
2. The ethnographer states that romantic love is important.
3. Marriages are not arranged.
4. Noncompelled, idealization-based faith and loyalty to mate are quite common.
5. In a society where marriages are traditionally arranged, elopement is frequent and accepted.
6. Married individuals give nonobligated gifts to one another and spend spare time together.
7. Belief in predestination for married partners, i.e., that for every individual there is only one mate.
8. Suicide over unrequited love.
9. People clearly gain happiness and pleasure from marriage.
10. Mourning at death of spouse if not required by custom.
11. Jealousy, if it seems to reflect strong attachments rather than concern with one's own image.

Some of these criteria, such as the belief in predestination for marriage partners, seem to reflect elements of the "romantic ideal" of the Middle Ages (or of contemporary Hollywood) which are not closely related to the conception of romantic love embodied in the present research. Others of Rosenblatt's criteria, however, seem to be in close accord with the content of the love scale. They include direct or indirect references to affiliative and dependent need (Items 6 and 10), exclusiveness (Item 11), and the predisposition to help (Items 4 and 6).

The correspondence between Rosenblatt's societal criteria and the content of the love scale is heightened by the fact that although the criteria appear to focus upon love within marriage, "the material for pre-marital relations seems to have been richer; consequently, the ratings probably reflect mate selection processes more strongly than relations after marriage" (Coppinger & Rosenblatt, 1968).

In the first of the two studies cited, Rosenblatt (1967) found that romantic love was most important as a basis for marriage in societies with non-neolocal residence after marriage, next most important in societies with neolocal residence as a significant alternative to non-neolocal residence, and least important in societies with neolocal residence. He concluded that "romantic love may serve to promote the integrity of a marriage by protecting it from divisive pressures of nearby relatives, to unite groups by providing a relatively strong bond between them, and to provide cohesion in a marital relationship in the face of the lower level of economic dependence of spouses that may be common where residence is non-neolocal" (Rosenblatt, 1966, p. 479). Further support for the last of these postulated functions of love was obtained by Coppinger and Rosenblatt (1968), who found that within the 55 societies with non-neolocal residence, the romantic love ratings were slightly, but significantly, correlated ($r = .25$) with an indirect measure of the extent to which spouses are not dependent upon one another for their subsistence. The researchers concluded that romantic love is a functional substitute for subsistence dependence as a means of stabilizing marriage.

Rosenblatt's methodology and his specific interpretations are both open to serious question. His research is nevertheless most impressive,

both because of its scope and ingenuity and because of the strong support which it provides for the view that romantic love is an important and pervasive element of social structure. As Rosenblatt puts it, "It no longer seems reasonable to state that romantic love is rare across cultures and occurs in our own culture because of some grotesque cultural pathology. Rather, it seems that romantic love occurs in greater or lesser amounts throughout the world and that variations in romantic love can be fruitfully studied (Rosenblatt, 1967, p. 479). In addition, it is possible to generalize from Rosenblatt's conclusions with regard to subsistence dependence and, particularly, marital residence to the following proposition, which will provide a theoretical perspective for the evaluation of the results to be presented in this chapter:

Proposition. The level of romantic love held by dating partners toward one another is a direct function of the magnitude of the external obstacles to their relationship. This proposition requires a good deal of qualification and specification. It is clear, for example, that if the external obstacles to a relationship are sufficiently great, the relationship will terminate. The level of love within a terminated relationship is typically quite low. Moreover, the distinction between "external" and "internal" obstacles to a relationship is not intuitively obvious. In order to further clarify the proposition, it will be useful to consider briefly one potential psychological function of romantic love.

A Dissonance Theory Approach to Romantic Love

In addition to the analysis of its functions on the social-structural level, any attempt to explain variations in the amount of romantic love between different social groupings should also make reference to the

functions of love on the individual level. A theory of individual motivation is clearly needed if we are to make the jump from the statement that (to take Rosenblatt's conclusion as an example) "Romantic love may serve to promote the integrity of marriage by protecting it from divisive pressures of nearby relatives" to the statement that "There is more romantic love in some social groups than others because of the potentially divisive pressure of nearby relatives." My present purpose, therefore, is to devote explicit attention to the ways in which a particular motivational principle, Festinger's (1957) theory of cognitive dissonance, may help to explain between-group variations in romantic love.

In focusing on cognitive dissonance as an explanatory principle at the individual level, I am emphasizing a general motivational process, rather than calling attention to the variety of specific "motives" which may be relevant to the strength of a particular individual's predisposition to love a particular other. These include such motivational constructs as the needs for achievement, affiliation, and power, as well as the somewhat less clearly defined "growth need" postulated by Orlinsky (in press) and the variants thereof discussed by such theorists as Fromm (1956) and Maslow (1955). Motivational constructs have also been employed to explain the ways in which individuals select particular others from among a "field of eligibles" as dating partners and potential spouses. Although the empirical support for it has been less than overwhelming, Winch's (1958) "need-complementarity theory" of mate-selection remains an intuitively appealing notion. In the present research, however, no motivational measures were obtained and no questions about why the respondents thought they were attracted to one another were asked. Empirical analysis of the relationships between the strength of specific motives

and the magnitude and direction of an individual's love must, therefore, await further research.

Presupposing that the reader is familiar with the basic postulates of dissonance theory, let me point to its potential relevance to the question at hand by summarizing an informal study conducted by Cohen (in Brehm & Cohen, 1962, pp. 78-81). Thirty Yale undergraduates who were considering becoming engaged over Christmas vacation were located and asked a series of questions which were intended to reflect their degree of "pre-engagement conflict." These included questions about the amount of religious and socioeconomic similarity between the respondent and his prospective fiancée, the assumption being that dissimilarity with respect to these dimensions was an indication of such conflict. The students also completed Cohen's three-item "love-scale":

1. How much does your future seem empty without your (prospective) fiancée?;
2. In general, being as frank as possible, how much would you say you love your girl?;
- and 3. How much do you feel that you were 'meant for each other'?

Cohen's hypothesis in this study represented a straightforward derivation from Festinger's (1957) analysis of post-decision dissonance. Cohen assumed that for those students who actually did become engaged, the magnitude of post-decision dissonance would be a direct function of the magnitude of their "pre-engagement conflict." "Since the dissonance would be difficult to reduce by distortion of the objective difference," Cohen suggested, "it would more likely be reduced by magnification of the subjective need or love. Hence it was expected that, for all subjects who actually became engaged, the more negative the measure of objective conditions prior to engagement, the greater would be the increase in need

and devotion from before to after engagement" (p. 79). The prediction was confirmed. Among the 20 subjects who became engaged, those who had scored above the median on the index of pre-engagement conflict became more "loving" when the three-item scale was re-administered after the vacation, whereas those who had scored below the median on the conflict index became slightly less "loving." The difference in change scores between the two groups was highly significant.

This application of dissonance theory may be generalized from the consequences of engagement to the consequences of all decisions related to the initiation and intensification of a dating relationship. Any such decision will engender dissonance, the amount of which will be proportional to the amount of conflict which preceded the decision. Such conflict may be separated conceptually into "internal" and "external" components. (In fact, the two components will undoubtedly be highly inter-related. A rather loose, intuitive distinction will suffice for our present purposes, however.) The "internal" component of conflict refers to hesitations or misgivings which are not directly tied to objective facts about oneself and his dating partner. For example, a man may be unsure about whether he wants to "give up his freedom" by becoming involved with a particular woman. Or a woman may have doubts about the extent to which a prospective boyfriend is "kind and considerate." If in these instances a decision is made to initiate or to intensify a romantic relationship, the most direct means of reducing dissonance will be to change the attitude upon which the conflict had been based. The man might decide that he really doesn't mind giving up a bit of freedom. Similarly, the woman might conclude that her boyfriend is, in fact, kind and considerate, even though he does not seem to be on the surface. Her conclusion would involve

a form of idealization, but not an increase in love as it is presently conceived.

When the pre-decision conflict is rooted in more "external" (or objective) considerations, however, such direct means of reducing dissonance may not be available. If, for example, one's prospective fiancé is of a different religion from one's own, it will seldom be possible to reduce post-engagement dissonance by deciding that the two are, in fact, of the same religion. It may be possible for him to decide that religious differences are not really very important with respect to the choice of a mate. But to the extent that significant others (such as family members or sorority sisters) voice their opposition to interreligious marriage, and to the extent that he himself may have internalized such opposition, such minimization will be difficult to accomplish. More probably, a man in such a situation will reduce post-engagement dissonance by concluding that the negative aspect of the relationship (the religious difference) is overweighed by other factors. Specifically, he is likely to conclude that he loves her more.

This postulated means of dissonance-reduction, then, may help to clarify the proposition which was suggested by Rosenblatt's analysis of the social functions of romantic love. It is suggested that whenever a dating relationship is initiated or intensified, dissonance will result from the inevitably present negative aspects of the decision. To the extent to which the obstacles are "internal," or rooted in inherently subjective considerations, dissonance will be reduced by means of attitude change with respect to those specific considerations. To the extent to which the obstacles are "external," however, they cannot be "thought away"

without a great deal of reality distortion. Instead, dissonance will be reduced by means of increasing one's love for his partner.

The Threshold Principle

As Cohen acknowledges, the result of his "study of discrepant information in betrothal" is susceptible to several alternative explanations. The most obvious of these is that subjects with a relatively large degree of pre-engagement conflict did not become engaged unless their attraction toward their fiancées had increased appreciably by the end of vacation. For subjects with relatively little pre-engagement conflict, on the other hand, no such increase in attraction was a necessary precondition of becoming engaged. This alternative explanation suggests another rationale for the proposition that love will be a direct function of the magnitude of external obstacles to a dating relationship. I will call this explanation the threshold principle.

The threshold principle states that there is a "love threshold" associated with every decision to initiate or to intensify a dating relationship. If a person's love for his partner or prospective partner exceeds this threshold, then he will take (or attempt to take) the associated step. If his love does not exceed this threshold, then the relationship will not be initiated or intensified. It may founder for a while, and will eventually be dissolved. Obviously, love is not the only factor which determines the progress of courtship. Many other factors, including social and economic considerations and, of course, the consent of one's partner, undoubtedly play significant roles. In putting forth the threshold principle, however, I am suggesting that the effects of such other factors be conceptualized in terms of their effects upon the height

of the love threshold. It is proposed, specifically, that the height of the love threshold is proportional to the magnitude of external obstacles to the progress of the relationship. The choice of the label "threshold" was suggested by a rather loose analogy to the mechanism of a perceptual defense. Just as, according to some reports, people's recognition thresholds tend to be higher for taboo stimuli (e.g., dirty words) than for neutral stimuli, people's love thresholds tend to be higher for unacceptable partners (e.g., members of a different religion from one's own) than for acceptable partners. There may also be individual differences in love thresholds. One connotation of the construct of "romanticism" makes reference to such differences: it may be assumed that in most situations people who are romantic have higher love thresholds than people who are non-romantic.

Both dissonance theory and the threshold principle can account for a hypothetical state of affairs in which love is a direct function of the magnitude of external obstacles to a relationship. With respect to the results to be presented, as in the case of Cohen's study, it will prove to be impossible to choose between the two explanations. This difficulty stems from the fact that in the present study, as in that of Cohen's, subjects could not be assigned randomly to conditions varying with respect to external obstacles. Instead, the subjects selected themselves for inclusion in one or another "condition." (As Chapanis and Chapanis [1964] note, this problem of subject self-selection is present even in dissonance experiments, in which there is frequently a differential amount of subject-loss across experimental conditions.) From a functional point of view, however, dissonance theory provides the more powerful explanation since it specifies a mechanism by which love may be increased. The alternative

account provided by the threshold principle stipulates that more love is required when the external obstacles are greater, but it has nothing to say about where the love comes from.

Romanticism and Thoughts About Marriage

Among the measures included on the questionnaire was a scale of "romanticism" adapted from Hobart (1958), who had revised the earlier scale of Gross (1944). As operationally defined by scores on this scale, a romantic person is one who believes that "love" (however he may define the term) is the only relevant basis for marriage. In addition, the romantic person subscribes to certain elements of the "romantic ideal"-- he is likely to believe that "love" is predestined and eternal. In the present research, more specifically, romantic respondents were those who tended to agree with the following items:

1. To be truly in love is to be in love forever.
2. As long as they at least love each other, two people should have no trouble getting along in marriage.
3. A person should marry whomever he loves regardless of social position.
4. Lovers should freely confess everything of personal significance to each other.
5. A lover without jealousy is hardly to be desired.

Romantic respondents were also those who tended to disagree with the following items:

1. Lovers ought to expect a certain amount of disillusionment after marriage.
2. True love should be suppressed in cases where its existence conflicts with prevailing standards of morality.
3. Economic security should be carefully considered before selecting a marriage partner.

4. Most of us could sincerely love any one of several people equally well.
5. One should not marry against the serious advice of one's parents.

These items were accompanied by a six-point scale, ranging from "Strongly Disagree" to "Strongly Agree." It proved to be possible to obtain an approximately normal distribution of scores, and at the same time to avoid the potentially biasing effects of an extremity response style (cf. Hamilton, 1968), by scoring all items dichotomously.

In the previous chapter it was reported that the men in our sample obtained significantly higher romanticism scores than the women. This pattern has been found in other investigations (Hobart, 1958; Knox and Sporakowski, 1968), and it is in accord with a body of research suggesting that in modern America romanticism is more clearly a part of the male than of the female sex role. Burgess and Wallin (1953) found, for example, that men are more likely than women to report having fallen in love at first sight, and Kephart (1967) found that nearly twice as many men as women felt that they were "very easily attracted" to members of the opposite sex. Women, on the other hand, seem to have a more "adaptive" orientation toward courtship and marriage. Coombs and Kenkel (1966) found that college women were more stringent than men in their demands for a computer-selected date with respect to such dimensions as campus status and scholastic ability and were more concerned than men about obtaining a date of their own race and religion. A good illustration of this sex difference was provided when Kephart (1967) asked his student respondents the following question: "If a boy (girl) had all the other qualities you desired, would you marry this person even if you were not in love with him (her)?" Few respondents answered "yes" to this question,

but only 24 percent of the women as compared to 65 percent of the men answered "no." Fully 72 percent of the females and only 24 percent of the males said they were undecided. As one co-ed told the interviewer, "If a boy had all the other qualities I desired, and I was not in love with him--well, I think I could talk myself into falling in love." This sex difference also seems to be directly relevant to the presumed tendency for American women to "marry up" (cf. Rubin, 1968).

Although the existence of this difference in the romantic orientations of the two sexes seems to be rather well established, the sex dimension accounts for only a small portion of the variation in the romanticism scores of the present sample. In several of the analyses to follow, therefore, the respondents' degree of romanticism, dichotomized at the median, will be included as an "independent" variable. Henceforth, those students who responded to five or fewer of the scale items in the romantic direction will be referred to as "non-romantic," and those who responded to six or more of the items in the romantic direction will be referred to as "romantic." The major "dependent" variable in the analyses that follow will be respondents' love scores, and I will be attempting to explain variations in love in terms of the social-structural considerations discussed above. (The specification of particular variables as "independent" and "dependent" is, of course, somewhat arbitrary in cases in which the data are essentially correlational. The terms refer more to the format than to the conceptual status of the analyses.) First, however, it will be of interest to consider the joint effects of religious symmetry and romanticism on respondents' estimates of the likelihood that they would marry their current dating partners. These results are presented

in Table 15.³

TABLE 15

MEAN ESTIMATES OF MARRIAGE PROBABILITY AS A FUNCTION
OF INDIVIDUAL ROMANTICISM AND COUPLE'S RELIGIOUS SYMMETRY

	WOMEN		MEN	
	Non-romantic	Romantic	Non-romantic	Romantic
Same Religion	6.18 (51)	6.44 (39)	4.96 (50)	6.12 (50)
Different Religions	3.91 (34)	6.74 (27)	4.78 (23)	5.51 (37)

Note.--Marriage probability scores range from 0 (0-10%) to 9 (91-100%). Cell N's appear in parentheses.

Inspection of the cell N's in this table reveals a tendency for "romantics" to be overrepresented in the different-religion couples, especially among men. This disproportionality is not significant for either sex or for the two sexes combined, however (for the combined sample, $\chi^2 = 2.00$, $p > .10$). It appears, then, that romantics, who tend to believe (among other things) that one should marry whomever he loves, regardless of social position or of parental opposition, are only slightly more likely than non-romantics to be dating someone of a different religion from their own. The effect of romanticism is more pronounced,

³In all the analyses to be presented in this chapter the data for engaged couples will be included with those for non-engaged couples. It may be noted that if engaged couples are excluded (as they were in my original examination of these data), artifactual conclusions are likely to be drawn. As might be expected on the basis of the frequencies which were presented in Table 14, engaged couples are particularly likely to be symmetrical with respect to religion. In 15 of the 24 engaged couples in the sample both partners were of the same religion and in only six were they of different religions. (In the remaining three cases the religion of one of the partners was categorized as "none or other.") The effect of eliminating the engaged couples, therefore, would be to underestimate the relative intensity of the same-religion relationships.

however, upon the respondents' estimates of the likelihood that they will marry their dating partners. A three-way unweighted means analysis (Winer, 1962) of the marriage-probability estimates yielded three significant or near-significant effects:

1. Estimates are higher if one's partner is of the same religion as his own than if he is of a different religion ($F_{1,313}=3.64$, $p < .07$).
2. Romantics make higher estimates than non-romantics ($F_{1,313}=11.87$, $p < .01$).

3. There is a triple interaction among the three independent variables (sex, religious symmetry, and romanticism) ($F_{1,333}=4.31$, $p < .05$). Analyses of simple effects make clear the nature of this interaction. Among men, the only significant effect is that of romanticism ($F_{1,313}=3.39$, $p < .07$). Among women, on the other hand, there are significant or near-significant effects due to religious symmetry ($F_{1,313}=3.46$, $p < .07$), romanticism ($F_{1,313}=9.73$, $p < .01$), and their interaction ($F_{1,313}=6.80$, $p < .01$). Inspection of the means for women indicates that all three of these effects can be accounted for by the unusually low estimates of non-romantic women who are dating someone of a different religion from their own.⁴

To summarize these results, men who are dating women of a different religion from their own consider it just as likely that they will marry their partners as do men who are dating women of the same religion as

⁴The main effect of sex, which was highly significant when the relative estimates of the partners within each couple were compared (see p. 63), does not approach significance in this analysis ($F_{1,313}=1.73$, $p < .25$). The unweighted means analysis employed here is particularly unsuited to detect the main effect of sex because of the fact that the ratio of romantics to non-romantics is greater among men than among women.

their own, and this is true regardless of their level of romanticism. In both cases, however, romantic men seem to be more marriage-prone than non-romantic men. Women, on the other hand, feel that it is much more likely that they will marry their boyfriends if they are of the same religion. And this difference can be specified by recourse to the measure of romanticism: it is only the non-romantic women who make the religious distinction.

The fact that women, but not men, consider the likelihood that they will marry their current dating partners to be greater if the two are of the same religion than if they are of different religions is in accord with the previously cited research pointing to the greater concern of women than of men with the social characteristics of prospective mates (e.g., Coombs & Kenkel, 1966; Kephart, 1967; Scott, 1965; Rubin, 1968). And the fact that a woman's degree of romanticism is an important classifying variable in this regard lends construct validity to the Romanticism Scale. The finding that, regardless of religious considerations, romantic men feel that it is more likely that they will marry their current dating partners than do non-romantic men is a less obvious one. In terms of our explication of the construct of romanticism, one would expect the estimates of romantic people to be relatively high if (and only if) they considered themselves to be "in love" with their partners. Among romantic people who do not consider themselves to be in love, the estimates of marriage probability should be relatively low. The present findings seem reasonable, however, when it is recalled that over two-thirds of the students in the sample do, in fact, consider themselves to be in love (Table 7). Only about 10 percent said they were not in love and the rest were uncertain. In this love-filled context, it is no wonder that romantic

men perceive marriage to their present flames as being more certain than do non-romantics.

This explanation suggests, of course, that among those men who do not consider themselves to be in love, there should be no such tendency for romantics to see marriage to their present girlfriends to be more probable than do non-romantics. This is, in fact, the case. Among the men who are not in love (including those who said they were "uncertain"), the mean marriage probability of non-romantics ($N = 29$) is 2.79 and the mean estimate of romantics ($N = 29$) is 2.31. The difference between these means is slight ($t = .81$) and it is in the direction opposite to the difference between non-romantics and romantics in the total sample. Among the women who are not in love (or uncertain), there is an interaction between religious symmetry and romanticism paralleling that found in the total sample ($F_{1,47} = 3.83, p < .06$). This effect seems to be in accord with our previous discussion of women's orientation toward mate-selection. A non-romantic woman, whether or not she is in love with her boyfriend, should consider the chances that she will marry him to be greater if he is of the same religion as her own than if he is of a different religion, whereas his religion should make little difference to the romantic woman. It is also noteworthy that among the women who are not in love (or uncertain), there is no main effect of romanticism upon marriage probability ($F < 1.0$). This result differs from that for the total sample of women, and is congruent with the notion that romantics see marriage as more imminent than do non-romantics if and only if they are in love.

Remembrance of Loves Past

Before turning to the effects of religious symmetry and romanticism

on our major dependent variable, love scores, I would like to consider another effect of romanticism. Toward the end of the questionnaire, respondents were asked the following question: "Not counting your relationship with ____ (your current boyfriend or girlfriend), how many times have you been in love, since the time you entered high school?" Kephart (1967) found that in his sample of 1,000 Philadelphia college students the cumulative number of romantic experiences reported (including both "loves" and "infatuations") showed a logical increase with age for men, but a surprising decrease with age for women. These disparate trends revealed themselves most clearly when the dimension of "closeness to marriage" ("not in love"- "in love"-engaged-married) was substituted for that of age. As males approached marriage, the number of romantic experiences that they reported tended to increase. As females approached marriage, on the other hand, the number of reported romantic experiences tended to decrease. Kephart interpreted the latter result as reflecting retrospective distortion on the part of the women, who tend to "adapt their romantic inclinations to the exigencies of marital selection." He suggested that for women (but not for men) previous love affairs which do not lead to marriage "either fade out altogether or are remembered merely as passing fancies."

In the present study the number of previous loves reported ranged up to six. The modal response was zero, however, and this variable was therefore treated as a none-vs.-one or more dichotomy. The "all women" and "all men" summaries of Table 16 reveal that a decrease in reported previous loves with increasing closeness to marriage (as categorized by the respondents' estimates of marriage probability) is characteristic of both sexes in the present sample. The tendency is stronger among the

TABLE 16

NUMBER OF PREVIOUS LOVES AS A FUNCTION OF ESTIMATED MARRIAGE PROBABILITY

Marriage prob.	WOMEN						MEN					
	Non-romantic		Romantic		All women		Non-romantic		Romantic		All men	
	0	1+	0	1+	0	1+	0	1+	0	1+	0	1+
0-40%	11	20	4	9	15	29	8	17	10	16	18	33
41-80%	15	20	10	10	25	30	12	23	18	10	30	33
81-100%	28	11	22	22	50	33	10	12	27	17	37	29
All	54	51	36	41	90	92	30	52	55	44(a)	85	96(a)

Note.--One man did not respond to the question about previous loves.

^aIncludes one man who did not make an estimate of marriage probability.

women ($\chi^2 = 8.37$, $df = 2$, $p < .005$) than among the men ($\chi^2 = 4.98$, $df = 2$, $p < .10$), however. The finding of an inverse relationship between closeness to marriage and previous loves for men as well as women may suggest that the two sexes do not differ as sharply in their "romantic inclinations" as Kephart concludes they do. There is an additional factor which may help to explain the apparent contradiction between the present results and Kephart's findings. In the present sample the relationship between age and estimated marriage probability was relatively slight ($r = .21$ for women and $.19$ for men). Although Kephart does not report the magnitude of this relationship for his sample, he implies that it is considerably larger (as would be expected in light of the fact that his sample included married respondents and had a wider age range than the present one). In the present case, therefore, there is a strong possibility that the inverse relationship between estimated marriage probability

and previous loves reflects the truth (as well as, perhaps, some degree of retrospective distortion). Specifically, those students who perceived themselves as being relatively close to marriage also tended to have been dating their current partners for a relatively long period of time (see Table 10), and thus may well have had less time for previous loves.

In addition to the relationship between marriage probability and previous loves, Table 16 shows that romantic men are less likely than non-romantic men to report having had one or more previous loves ($\chi^2 = 5.74$, $df = 1$, $p < .025$). This effect of romanticism is not revealed among the men with low (0-40%) marriage probability estimates, but it is contributed to by both the medium (41-80%) and high (81-100%) marriage probability groups. Among the women, on the other hand, there is no relationship between romanticism and previous loves. The finding that romantic men who are at least moderately certain that they will marry their current girlfriends report fewer previous loves than their non-romantic counterparts seems quite reasonable. Romantics tend to believe that "To be truly in love is to be in love forever" and to disbelieve that "Most of us could sincerely love any one of several people equally well." It would be consistent with these views for the romantic person who is currently in love to decide that his previous relationships had not really been "love" at all.

It is also possible that the causal chain runs in the opposite direction, however. People who have never been in love previously may be more willing than seasoned lovers to conclude that love strikes only once, and, hence, to categorize themselves as "romantics." Some support for the latter interpretation is provided by the fact that romantic men also report

having "gone together" with someone (previous to their present relationship) fewer times than do non-romantic men. The mean frequencies were 1.83 for romantics and 2.56 for non-romantics ($t = 2.53$, $df = 177$, $p < .02$, 2-tailed). And in this instance, the difference was greatest among the men whose estimates of the likelihood that they would marry their present girlfriend were low (0-40%). Among these relatively uninvolved men, the mean reported frequency of previous involvements was 1.88 for romantics and 3.20 for non-romantics ($t = 2.26$, $df = 49$, $p < .05$, 2-tailed). It seems unlikely that relatively uninvolved men who are romantic would underrecall previous relationships to a greater extent than would relatively uninvolved men who are non-romantic. A more likely explanation is that the lack of dating experience produces greater romanticism, or, along the same lines, that dating experience reduces romanticism.

These results, in conjunction with those previously reported in Table 15, may help us to locate romanticism (for men) as intervening between previous dating experience and present expectations of marriage. Men who have had relatively few previous relationships tend, as a result, to be romantic. And, accordingly, their estimates of the likelihood that their present relationship will lead to marriage is relatively high. Men who have been through it all before, however, are more likely to be non-romantic, and, hence, to perceive the probability of marrying their present girlfriend to be relatively low. The "true" relationships among these three variables are undoubtedly more complex than this, and the causal chains may well run in both directions. Nevertheless, this causal model seems to accord rather well with the obtained results.

It remains for us to consider the implications of the fact that a relationship between romanticism and the presence or absence of previous

loves was not found among women. Neither was there a relationship among women between romanticism and the number of times the respondent reportedly had "gone together" with someone. The mean scores on this variable were 2.28 for non-romantic women and 2.15 for romantic women ($t = .46$). One explanation, which is consonant with the results presented in the section preceding this one, is that the Romanticism Scale measures somewhat different things for the two sexes. For men the implications of being "romantic" seem to be centered upon the causes and effects of the beliefs that love hits a person only once in his lifetime and that it inevitably leads to marriage (in the context of which, presumably, it lasts forever). The experience of having love affairs (or, more generally, dating relationships) which do not last forever may serve to disabuse the young man of some of these beliefs. Knox and Sporakowski (1968) make a similar argument in explanation of their finding that scores on their 29-item romanticism scale were highest among a sample of college freshmen, and progressively lower for sophomores, juniors, and seniors.⁵ For a woman, on the other hand, the major implication of being "romantic" seems to be a greater willingness to marry a socially unacceptable partner--specifically, in terms of the data presented, someone whose religion is different from her own--regardless of whether or not she is in love with him. In terms of this conception, the extent of one's dating experience may be a less important determinant of romanticism among women as such other factors as parental and peer-group attitudes.

⁵This steady decrease apparently characterized both sexes in Knox and Sporakowski's sample rather than men alone, however. In the present study, there was a slight inverse relationship between romanticism and age for men ($r = -.127$, $p < .10$, 2-tailed) and no relationship at all for women ($r = -.004$).

This equation of romanticism among women with a lack of ethnocentrism with respect to the choice of a marriage partner prompted me to make the prediction that women's scores on the Romanticism Scale and on the F-Scale would be inversely correlated. This prediction was confirmed. Correlation between women's scores on the two scales is $-.271$ ($p < .001$, 2-tailed). Among men the correlation between these two scales is also negative, but of lower magnitude ($r = -.139$, $p = .06$, 2-tailed). The difference between these two correlations approaches significance only if we permit ourselves the luxury of a one-tailed test ($z = 1.31$, $p < .10$, 1-tailed). In spite of the borderline nature of this difference, this pattern of correlations seems to me to provide further support for the argument that the meaning of one's romanticism score depends on his (or her) sex.

The Love Scale Revisited

This chapter began with data indicating that dating partners in the present sample were more often than not of the same religion, and that, moreover, the proportion of different-religion pairs was greatest among short-term couples and smallest among long-term couples. This was followed by a discussion of the potential social functions of romantic love, leading to the general proposition that the level of love in a dating relationship should be a direct function of the magnitude of the external obstacles to the relationship. An attempt was made to specify this proposition by considering two ways in which such a state of affairs might come about. It was suggested that love might increase in the face of external obstacles as a means of reducing cognitive dissonance, or that, alternatively, a relatively high degree of love might be a prerequisite

to any decision to initiate or intensify a relationship in the face of external obstacles (the "threshold principle"). In the preceding two sections the focus shifted to romanticism, a set of attitudes which seems to play an important role in determining the way in which the social context of a dating relationship will affect an individual's marital inclinations. It remains for me to try to tie together some of these disparate strands of theory and data by considering the ways in which such variables as romanticism and religious symmetry are linked to our major variable of interest, love. To this end I will first outline two predictions, and then we will see how well they are borne out by the data.

Prediction 1. The relationship between love and estimates of marriage probability will be stronger among romantic men than among non-romantic men. Among women there should be no such difference.

This prediction is derived rather directly from the previously reported results indicating that romantic men tend to behave in ways consistent with the beliefs that love lasts forever and that one should marry whomever he loves. It was argued that among women romanticism has relatively little to do with love, but rather is a measure of one's relative willingness to marry a socially unacceptable partner.

Prediction 2. Respondents of both sexes should love their partners more if the two are of different religions than if they are of the same religion. Moreover, the magnitude of this difference should be a direct function of the length of time that the couples have been dating.

The first part of this prediction is suggested by the previously stated proposition that love should be a direct function of the magnitude of external obstacles to a dating relationship. The second part of the prediction is in accord with both the dissonance theory analysis and the

"threshold principle" presented earlier. The longer one goes out with a socially unacceptable partner (e.g., someone of a different religion from his own) the more dissonance should result and, hence, the more his love should increase. Alternatively, in terms of the threshold principle, larger increases in love are necessary to justify the continuation of a dating relationship with an unacceptable partner than would be required in the case of a relationship with an acceptable partner. If we assume that these prerequisite increases are cumulative, the second part of the above prediction logically follows.

Love and Marriage

Table 17 presents the correlations between love and marriage probability for subgroups of respondents as categorized by their sex and level of romanticism.

TABLE 17

CORRELATIONS BETWEEN LOVE AND ESTIMATED MARRIAGE PROBABILITY
AMONG NON-ROMANTIC AND ROMANTIC RESPONDENTS

	Non-Romantic	Romantic	<u>z</u> for difference
Women	.590 (105)	.562 (77)	.27
Men	.496 (83)	.634 (98)	1.35*

Note.--Cell N's appear in parentheses.

* $p < .10$, 1-tailed.

The prediction that this relationship would be stronger among romantic men than among non-romantic men was confirmed, but only at a relatively low level of confidence ($p < .10$). As expected, the correlations between love and marriage probability among non-romantic and romantic women

were almost identical.

An alternative way of testing Prediction 1 is to examine respondents' love scores as a joint function of their level of romanticism and their estimates of marriage probability. For this purpose, women were considered to have a "low" expectation of marrying their partners if their estimates were lower than 70 percent and to have a "high" expectation of marrying their partners if their estimates were higher than 70 percent. In light of their generally lower estimates of marriage probability, the cutoff point for men was set at 60 percent. These results are presented in Table 18.

TABLE 18

MEAN LOVE SCORES AS A FUNCTION OF ROMANTICISM
AND ESTIMATED MARRIAGE PROBABILITY

	Non-Romantic	Romantic	<u>t</u> for difference
Women--Low Marriage Prob.	83.14 (58)	85.07 (29)	.52
Women--High Marriage Prob.	96.08 (47)	97.48 (48)	.63
All women	88.93 (105)	92.80 (77)	1.72 *
Men--Low Marriage Prob.	81.60 (48)	82.80 (36)	.36
Men--High Marriage Prob.	94.57 (35)	99.52 (62)	2.34 **
All men	87.07 (83)	93.38 (98)	2.90 ***

Note.--Cell N's appear in parentheses.

* $p < .10$ (2-tailed)

** $p < .025$ (2-tailed)

*** $p < .01$ (2-tailed)

These results reveal that there is a tendency for romantics of both sexes to love their partners more than do non-romantics. This tendency may be seen as paralleling the main effects of romanticism upon marriage probability discussed earlier (and also reflected in the cell N's of

Table 18). With respect to love, however, the effect of romanticism is considerably stronger among men than among women. It is clear, moreover, that virtually all of the difference between the love scores of non-romantic and romantic men is due to the effect of romanticism among those men whose estimates of marriage probability were high. This finding, in conjunction with the correlational evidence presented in Table 17, provides at least limited support for Prediction 1.

Interfaith Dating and the Course of Love

The mean love scores of women and men in same-religion and different-religion couples are presented in Table 19.

TABLE 19

MEAN LOVE SCORES IN SAME-RELIGION AND DIFFERENT-RELIGION COUPLES

	Same Religion	Different Religion	<u>t</u> for difference
Women	90.32	89.15	.48 (<u>ns</u>)
Men	89.77	91.84	.87 (<u>ns</u>)
<u>N</u>	100	61	

On the basis of these means the first part of Prediction 2 is clearly disconfirmed. There is no overall tendency among either sex for respondents to love partners of a different religion from their own more than partners of the same religion. It remains possible, however, that the second part of Prediction 2 is accurate. Perhaps we will find greater love for different-religion than for same-religion partners among couples who have been dating for relatively long periods of time. In order to assess this possibility, the couples were divided into four

subgroups on the basis of their reported length of dating (for the purpose of this categorization, the average of the two partners' estimates was used). These categories were three months or less (40 couples), four to 11 months (41 couples), 12 to 17 months (41 couples) and 18 months or more (60 couples).⁶ Before love scores are presented as a joint function of religious symmetry and length of dating, it will be worthwhile to consider the simple effects of length of dating upon love. These results are summarized in Figure 1.

In interpreting Figure 1 (as well as the subsequent figures) it should be borne in mind that it is based on cross-sectional rather than longitudinal data. Thus any inferences concerning the course of love within a single relationship are necessarily indirect. All interpretations must take into account the fact that couples who break up after a given length of time are not represented among our sample of volunteers. As the "threshold principle" suggests, such breakups may be most common among couples whose level of love was not great enough to justify the continuation of the relationship. Given this caveat, the shapes of the functions relating love to length of dating suggest that there tends to be an increase in love (among surviving couples) during the first half year or so of dating. The increase in love scores from the "0-3 month"

⁶The unequal size of these subgroups is a result of the fact that when these data were initially examined the 24 engaged couples were not included. When it was subsequently realized that this exclusion was inappropriate (see footnote 3) the data for the engaged couples were added, but it was not deemed necessary to change the category boundaries. Since most of the engaged couples had been dating for relatively long periods of time, their inclusion made the "18 + month" subgroup larger than the other three. It is doubtful, however, that the creation of more equally sized subgroups would have any substantial effect on the conclusions to be drawn.

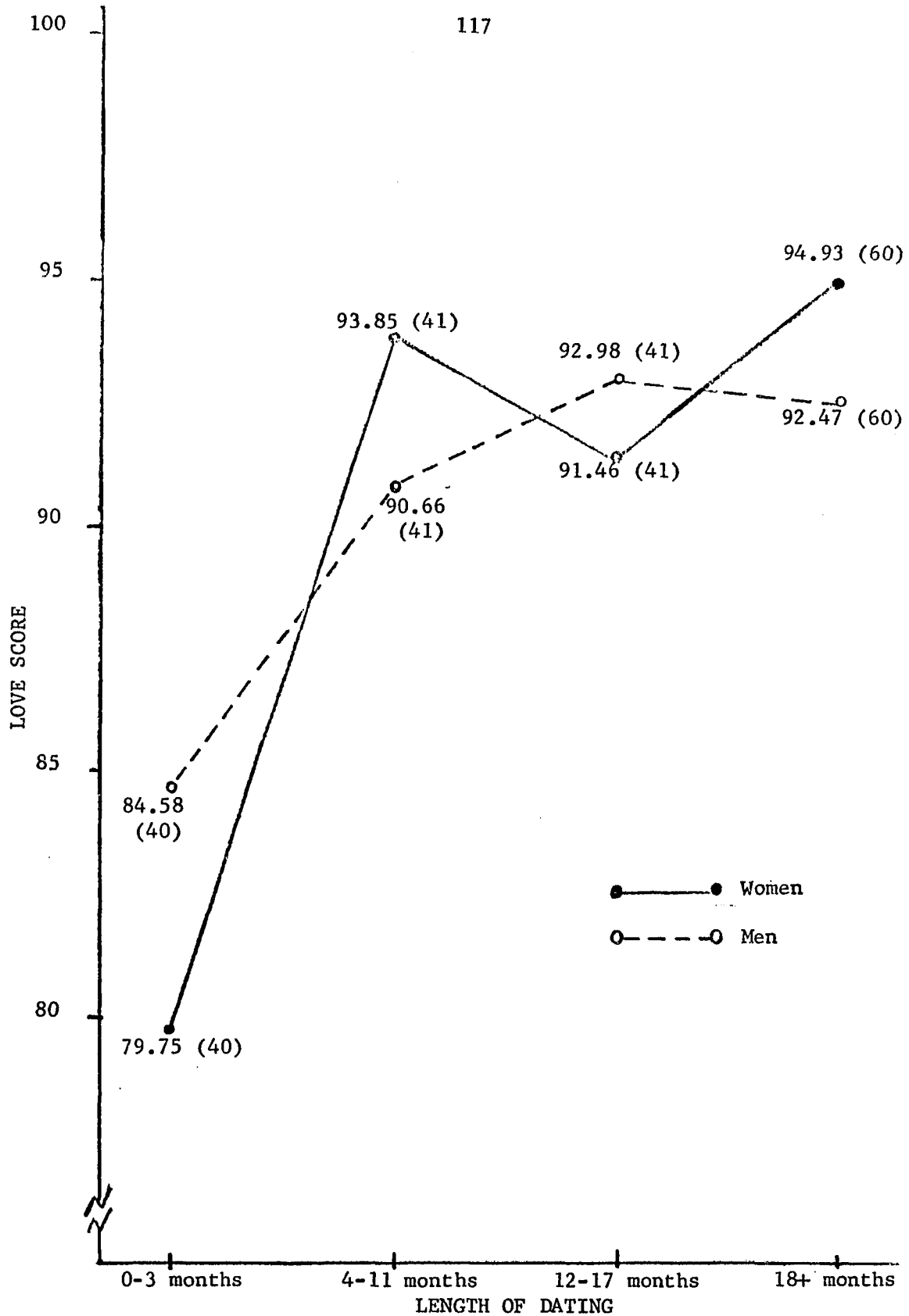


Figure 1. Women's and men's love as a function of length of dating.

Note.--Number of cases in each cell is given in parentheses.

to the "4-11 month" subgroup is significant or near-significant for both sexes (for women, $t = 3.99$, $p < .01$, 2-tailed; for men, $t = 1.84$, $p < .07$, 2-tailed). After a year of dating, however, the mean level of love becomes relatively stable. This leveling off may be attributable to some extent to ceiling effects. The results to be presented in Figures 2 and 3 make it doubtful that ceiling effects provide the entire explanation, however.

Figure 1 also indicates that among the extreme short-term couples ("0-3 months"), men tend to love their girlfriends more than women love their boyfriends (t for matched pairs is 1.73, $p < .10$, 2-tailed). None of the sex differences among the longer-term couples approach significance. The sex difference among the "0-3 month" couples is in accord with previous research indicating that men are more likely than women to report having fallen in love at first sight (Burgess & Wallin, 1953) and to state that they are easily attracted to members of the opposite sex (Kephart, 1967). More generally, this result is in line with the conclusion that the male sex is also the "romantic" sex. As might be expected in this connection, there is a positive correlation between love and romanticism among "0-3 month" men ($r = .287$, $p < .05$, 1-tailed), but not among the "0-3 month" women ($r = .033$). Among men romanticism seems to imply, among other things, a tendency for love to begin at a high level and/or to grow quickly. Among women there is apparently no such implication.

Our main interest in examining the relationship between love and length of dating stemmed from the prediction that among relatively long-term couples respondents will love partners whose religion is different from their own more than they will love partners of the same religion as

their own. Figures 2 and 3 present the relevant data for women and men respectively. A quick glance at each of these figures reveals that the prediction is wrong. Among women (Figure 3) the results seem to be in line with the prediction up to a point. There are no sizable differences between women's love for different-religion and same-religion partners in the "0-3 month" or the "4-11 month" subgroup, but in the "12-17 month" subgroup there is a large excess of love for different-religion partners ($t = 2.52$, $p < .02$, 2-tailed). Contrary to the prediction, however, this difference is not maintained in the "18 + month" subgroup. For women in these extreme long-term couples, in fact, boyfriends of the same religion tend to be loved slightly (but nonsignificantly) more than boyfriends of a different religion.

Among men (Figure 3) the results are even further out of line with the prediction. There is a tendency for men to love girlfriends of a different religion from their own more than girlfriends of the same religion if the couple has been dating less than 18 months (combining these three subgroups, t for this difference is 2.21 ($p < .05$, 2-tailed). For men in couples who have been dating 18 or more months, however, there is a clear reversal. Love for different-religion partners decreases from its peak in the "12-17 month" subgroup ($t = 1.80$, $p < .10$, 2-tailed), while love for same-religion partners continues its steady increase. The result is a slight excess in love for same-religion girlfriends in the "18 or more month" subgroup ($t = 1.62$, $p < .12$, 2-tailed).

Overall tests of the joint effects of religious symmetry and dating length upon love were performed by means of separate least-squares analyses of variance for each sex (Winer, 1962, p. 292). Among the women there is a highly significant effect of dating length ($F_{3,153} = 11.81$, $p < .01$).

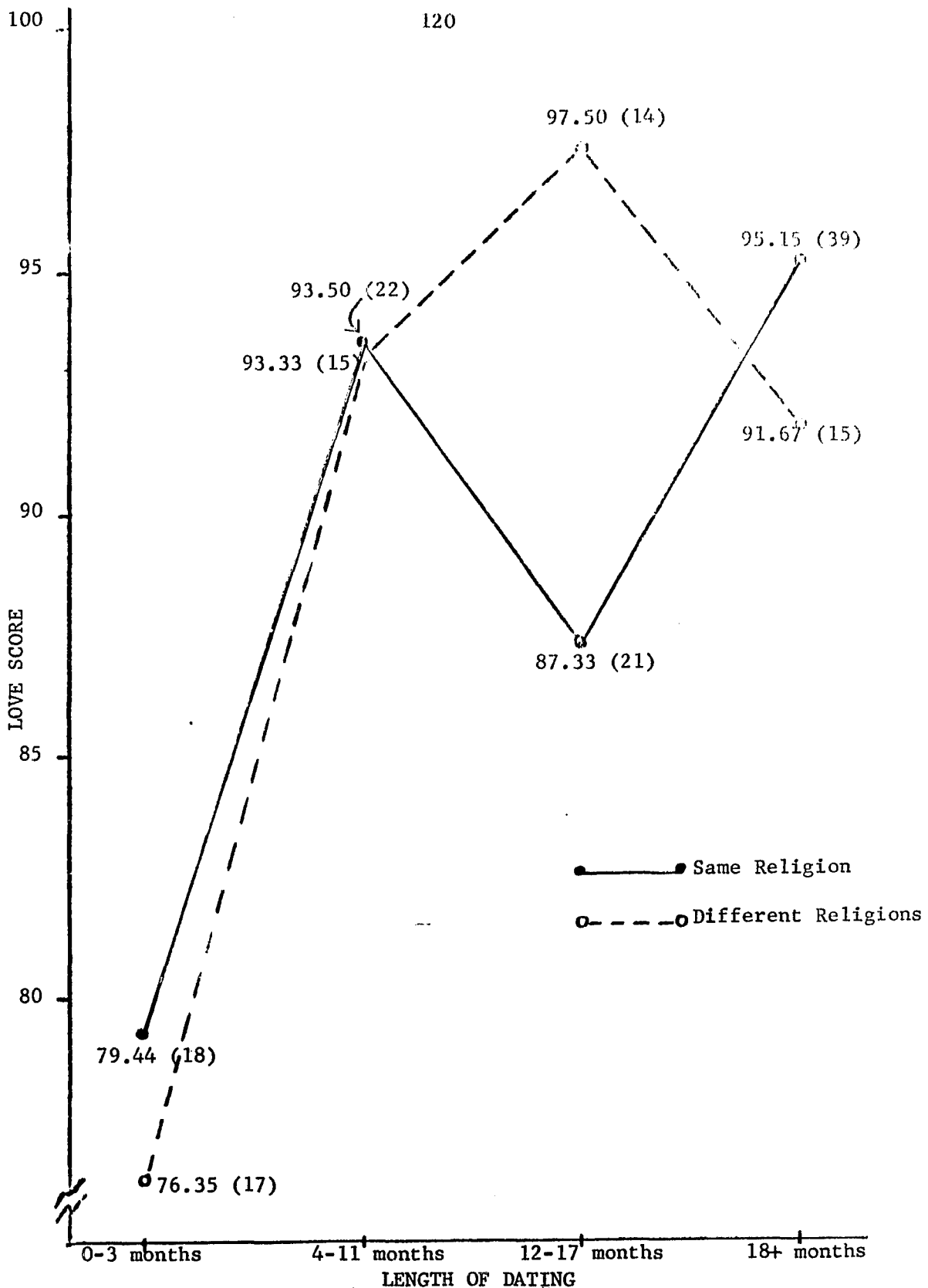


Figure 2. Women's love as a function of religious symmetry and length of dating.
 Note.--Number of cases in each cell is given in parentheses.

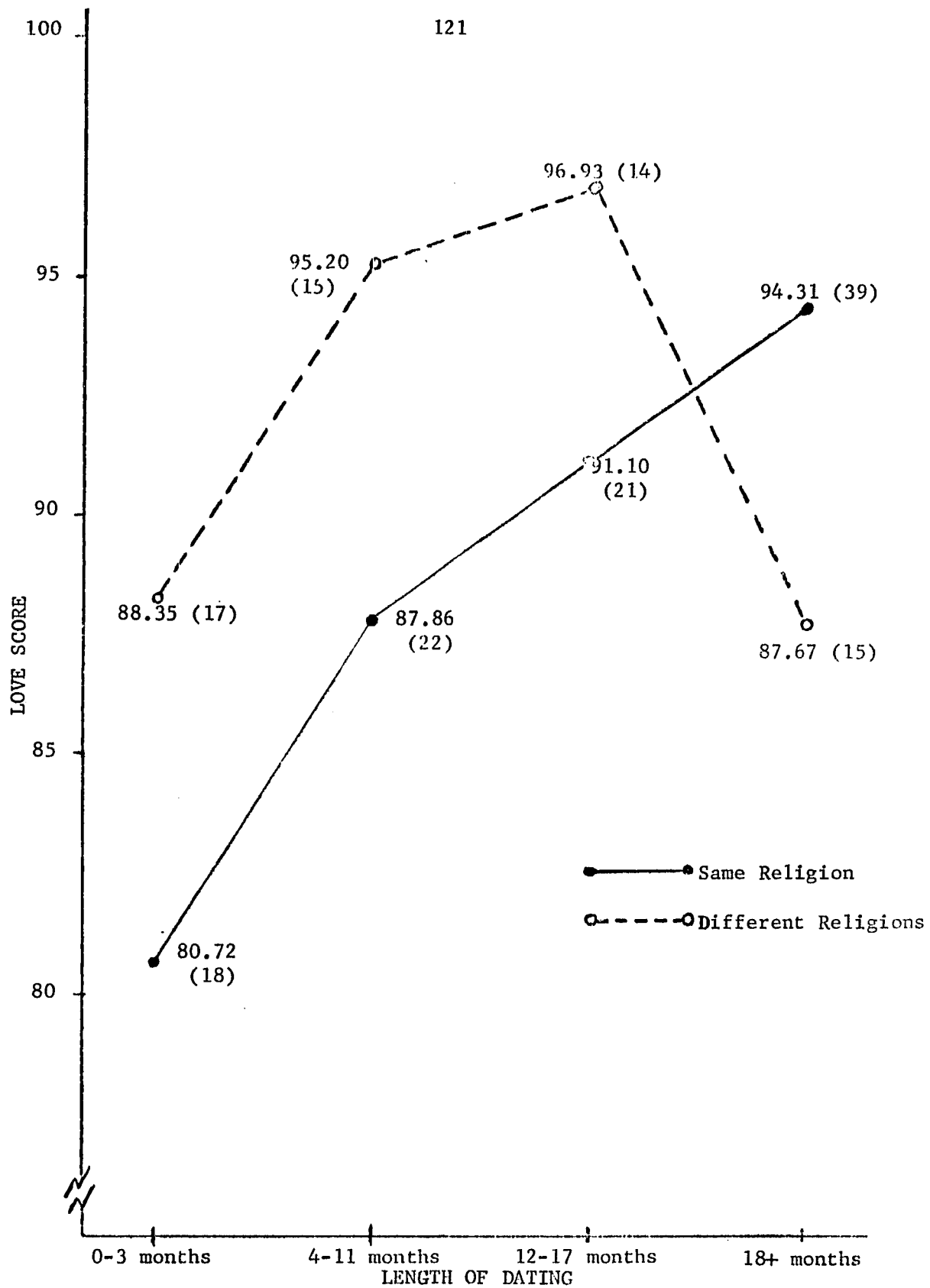


Figure 3. Men's love as a function of religious symmetry and length of dating.

Note.--Number of cases in each cell is given in parentheses.

There is no main effect due to religious symmetry ($F < 1$) and the interaction effect fails to attain significance ($F_{3,153}=1.95$). In light of the failure to obtain an overall interaction effect, the post hoc comparison of individual means presented above must, of course, be viewed with caution. Among the men both the main effect of dating length and the interaction between it and religious symmetry attained or approached significance (for dating length, $F_{3,153}=3.30$, $p < .025$; for the interaction, $F_{3,153}=2.40$, $p < .07$). The main effect of religious symmetry was not significant ($F_{1,153}=1.63$).

One way of summarizing these results is to say that they look good up to a point. If our sample had been limited to couples who had been dating less than 18 months, we would have found, as predicted, an overall tendency for men to love their girlfriends more if they are of a different religion from their own than if they are of the same religion. Among women we would have found no such overall tendency but instead, as predicted, a tendency to love partners of a different religion more than partners of the same religion among women in long-term couples (i.e., those who had been dating 12 to 17 months). As soon as the "18 + month" couples are brought into the picture, however, our predictions go awry. Among both sexes there is a totally unexpected tendency for love for different-religion partners to decrease (as love for same-religion partners increases) as our attention moves from the "12-17 month" subgroup to the "18 + month" subgroup.

One post hoc explanation for this effect is the possibility that there are anticipatory decreases in love among the long-term different-religion couples. As indicated earlier (Table 14), the composition of the sample with respect to religious symmetry and length of dating suggests (but by

no means proves) that there is a higher breakup rate among different-religion than among same-religion couples. Whereas there is a 1:1 ratio of same-religion to different-religion couples in the "0-3 month" subgroup, this ratio increases to 8:3 in the "18 + month" subgroup. Perhaps if we were to follow the progress of these long-term couples the ratio would increase even more. I am suggesting, in other words, that there is relatively little love among the long-term different-religion couples because these relationships are on the way out. The relatively low levels of love might, as the "threshold principle" would suggest, presage the termination of these relationships. In terms of dissonance theory, members of couples who are about to break up in the face of external obstacles may be motivated to justify that decision (somewhat in advance of its taking effect) by deciding that they really don't love their partners after all. Such an explanation does not negate the case made earlier on behalf of the proposition that love should be a direct function of the magnitude of external obstacles to a dating relationship. It serves, rather, to qualify the proposition by taking into account the anticipatory reactions of people who are about to yield to the external pressures.

Fortunately, some data are available to assess the reasonableness of this explanation. Approximately six months after the administration of the questionnaire, a one-page followup questionnaire (Appendix C) was mailed to all respondents. It was returned by 317 of the 364 original respondents (162 women and 155 men), a return rate of 87.1 percent. Followup reports were obtained from at least one member of 179 of the 182 couples (98.4 percent of the total). The major results of the follow-up study, including data concerning the ability of the love scale to predict progress in courtship, will be presented in Chapter 6. For our

present purposes, I will refer only to the couples in which one or both partners reported that they were "no longer dating." Only 29 couples fell into this category. In 20 cases the report of the breakup was received from both members of the couple, in eight cases from the one member who returned the questionnaire, and in one case (which was also categorized as a breakup) there was a discrepant report--she said they had broken up but he said they were still dating.

In spite of the relatively small number of breakups, it remained of interest to determine whether the breakups were concentrated among particular subgroups of couples, as categorized in terms of religious symmetry and length of dating. It was predicted, on the basis of the "anticipatory decrease" explanation stated above, that there would be a disproportionately large number of breakups among couples in the "18 + month" different-religion subgroup. The relevant results are presented in Table 20.

TABLE 20
FREQUENCY AND PROPORTION OF BREAKUPS AS A FUNCTION
OF RELIGIOUS SYMMETRY AND LENGTH OF DATING

	Length of Dating				Total
	0-3 months	4-11 months	12-17 months	18 or more months	
<u>Same religion</u>					
Number of breakups	6	2	1	5	14
Total responses	18	22	21	39	100
Proportion of breakups	.33	.09	.05	.13	.14
<u>Different religion</u>					
Number of breakups	5	2	1	5	13
Total responses	16	14	13	15	57
Proportion of breakups	.31	.14	.08	.33	.22
<u>Total</u>					
Number of breakups	11	4	2	10	27
Total responses	34	36	34	54	158
Proportion of breakups	.32	.11	.06	.18	.17

Although the total number of breakups is small, these results are in accord with the prediction. There is clearly no difference between the same-religion and different-religion couples in the proportion of breakups reported among couples who had been dating up to three months, four to 11 months, or 12 to 17 months at the time of the original questionnaire. Among the couples who had been dating 18 or more months at the time of the original questionnaire, however, the proportion of breakups among different-religion couples is more than twice as great as the proportion of breakups among same-religion couples. The chi-square value for this difference is 1.81 ($.10 < p < .20$). Table 20 also indicates that breakups tend to be most common among the extreme short-term couples. As the duration of the relationship increases, so does their stability, with the notable exception of the "18 + month" different-religion subgroup.

The followup data suggest, then, that the unexpectedly low level of love among the "18 + month" different-religion subgroup may be accounted for to some extent by anticipatory decreases in love within couples who are about to break up. Comparison of the love scores of respondents who did and did not break up indicates that the power of this explanation is rather limited, however. The mean love scores of members of "18 + month" different-religion couples who broke up are only trivially lower than the corresponding mean scores for members of couples who did not break up. As a result, even when the respondents who were later to break up are deleted from the sample, the previously reported tendency for members of "18 + month" same-religion couples to love their partners somewhat more (and certainly no less) than members of "18 + month" different-religion couples remains virtually unchanged. And, therefore, the finding that the

excess in love among different-religion couples fades out after about 18 months still awaits adequate explanation.

In the absence of a more adequate explanation, I am led to consider somewhat more seriously than I would otherwise the implications of these data for the advisability of interfaith marriage. Although the number of cases involved is small, the data nevertheless suggest that as dating couples approach marriage, love increases only if they are of the same religion. It was found, in fact, that even among engaged couples (most of whom are in the "18 + month" subgroup) love is greater if the two partners are of the same religion. These results are presented in Table 21.

TABLE 21
MEAN LOVE SCORES OF ENGAGED RESPONDENTS
AS A FUNCTION OF RELIGIOUS SYMMETRY

	Same Religion	Different Religions	<u>t</u> for difference
Women	97.40 (15)	96.67 (6)	.17
Men	100.27 (15)	89.83 (6)	2.13 *

Note.--Cell N's are given in parentheses.

* $p < .05$, 2-tailed.

The difference in means for women is clearly trivial. Among engaged men, however, in spite of the extremely small number of cases, the excess of love for fiancées of the same religion is statistically significant. Further research with larger numbers of more systematically sampled engaged couples would, of course, be necessary before we could conclude that the members of different-religion couples (or the men in those couples) tend to enter marriage with less love for their partners than do the

members of same-religion couples. Moreover, no assumption is made in the present research to the effect that romantic love is of positive value in marriage. On the other hand, the discussion earlier in this chapter of the social functions of romantic love and, in particular, Rosenblatt's cross-cultural research along these lines, suggest that the extension of romantic love into marriage may play an important stabilizing function.

There is reasonably strong evidence indicating that in the United States divorce rates for interreligious marriages are higher than those for intrareligious marriages (e.g., Zimmerman & Cervantes, 1960; and studies cited by Gordon, 1964, p. 93).⁷ It is at least possible that this phenomenon may be accounted for in part by the presence of relatively low levels of initial love within interfaith marriages. Perhaps more to the point, it may well be that if interfaith marriages in the United States were to be as stable as intrafaith marriages, in spite of the greater external pressures involved, an unusually high level of initial love would be required. An assumption of such equal stability may be seen as implicitly underlying the disconfirmed prediction that there would

⁷The interpretation of these data is by no means unambiguous, however. It may be, for example, that people who intermarry tend to have social and/or temperamental characteristics which would predispose them to divorce even if they married within their religion. It is also possible that interfaith marriages are no less successful than intrafaith marriages, but that people who intermarry are more likely to respond to incompatibility by getting divorced while people who do not intermarry are more likely to respond by suffering.

Interpretation of the results of research on intermarriage is further complicated by the fact that much of it seems to have been conducted in a partisan context. Gordon's (1964) book on the subject, for example, is a valuable and informative work which attempts to present at least some contrasting views. Nevertheless, its author is a practicing rabbi (as well as a professional sociologist) who is personally committed to the view that intermarriage is a social evil and whose research, as a result, sometimes seems to steer an uneasy course between scholarship and polemics.

be a particularly large excess of love among the different-religion couples who are closest to marriage. The suggestion that there is, in fact, no such excess (and, if anything, a deficit) seems to be in accord with the reports indicating that interfaith marriages tend to be relatively unstable.

Summary: The Love Scale as a Social Indicator

In this chapter it was suggested that romantic love may play a stabilizing role on both the social-structural and the individual levels of analysis. Adopting the general stance of the structural-functional theorist, I proposed that the level of love held by dating partners toward one another should be a direct function of the magnitude of external obstacles to their relationship. I also considered the way in which Festinger's theory of cognitive dissonance might account for such a state of affairs on the individual level. It is dissonant (and, therefore, uncomfortable) for someone to initiate or to intensify a dating relationship with a socially unacceptable partner. He may reduce this dissonance, however, by increasing his love for that partner. An alternative formulation is provided by the "threshold principle," which states that the increase in love comes before the initiation or intensification of the relationship, and that a greater increase is required if one's partner is socially unacceptable than if he is not.

The above reasoning led to the prediction that members of dating couples in which the two partners were of different religions would love one another more than would members of couples in which the two partners were of the same religion, and that the magnitude of this difference would increase as a direct function of the length of time that the couple had

been dating. These predictions proved to be reasonably accurate if (and only if) our attention is restricted to those couples who had been dating for less than 18 months. Among the shorter-term couples men tended to love their partners more if the two were of different religions than if they were of the same religion. Women loved same-religion and different-religion partners about equally among couples who had been dating for less than a year, but there was a large excess in women's love for different-religion partners (corresponding to the prediction) among those couples who had stuck it out for 12 to 17 months. Among the extreme long-term couples (those who had been dating for 18 or more months), however, there was a reversal which directly contradicted the prediction. Love for different-religion partners by both women and men declined from its 12-to-17-month peak, and was now at a slightly lower level than love for same-religion partners. Followup data on breakup rates indicated that a larger proportion of the long-term-different-religion couples than of the long-term-same-religion couples had been on the verge of breaking up at the time of the questionnaire. But comparison of the love scores of the respondents who broke up with the love scores of those who did not made it clear that "anticipatory decreases" in love could not adequately account for the reversal. The reversal remains unexplained, therefore, and it could only be suggested, extremely tentatively, that different-religion couples may enter marriage with a lower level of love than do same-religion couples. Meanwhile, the validity of the social-structural speculations presented--and, simultaneously, the value of the love scale as a sort of "social indicator"--remains in some doubt. This doubt will be reduced if the obtained fluctuations in love scores as a function of religious symmetry and length of dating are again found in further research,

particularly if it is research of a longitudinal nature.

A second theme of this chapter on the social context of love has been the relative "romanticism" of men and women. Several pieces of converging evidence were presented in support of the proposition that, in contrast to the stereotypes held by some, it is the male sex which is the more romantic. Thus, for example, men tend to love their girlfriends more than they are loved in return among the extreme short-term couples, a finding which is in accord with previous reports that men are more easily attracted to women than vice-versa. Men who are dating women whose religion differs from their own consider it just as likely that they will marry their partners as do men who are dating women of their own religion. Women, in contrast, reveal a more "adaptive" orientation toward marriage by making higher estimates of marriage probability if their partners are of the same religion as their own. Men also obtained higher scores than women on the Romanticism Scale employed, and among men romanticism (as measured by this scale) proved to be a particularly valuable explanatory variable. It was found that romantic men tended to be those with relatively little dating experience, that they considered marriage to their current girlfriends to be more likely than did non-romantic men, and that they loved their girlfriends more than did non-romantics if (and only if) they considered it likely that they would marry them. Among women, on the other hand, the major implication of being "romantic" was a greater willingness to marry a partner of a different religion from one's own.

In all of the analyses reported in this chapter I attempted to impose some degree of order upon the questionnaire data in terms of miniature causal models, involving no more than three variables at a time. It

should be quite clear that regardless of how valid some of these interpretations may be, they all involve a great deal of oversimplification. Such oversimplification was, in my view, appropriate to the exploratory nature of the present research. In future research along these lines, however, more sophisticated techniques of multivariate analysis might profitably be employed. In particular, the technique of path analysis, which has recently been called to the attention of sociological researchers by Duncan (1966), seems to me to be a potentially valuable and exciting way to explore causal links among networks of variables such as those employed in the present study.

CHAPTER V

LABORATORY EXPERIMENT: BEHAVIORAL MANIFESTATIONS OF LOVE

Correlational studies, such as the questionnaire investigation presented in the preceding two chapters, can play an important role in the enterprise of construct-validation by exploring the patterning of relationships within a network of variables. Such patterns can give us a "feel" for the nature of the construct being developed, and may in some cases disqualify a budding construct on the ground that its relationships with other presumably relevant variables are sparse or inappropriate. The emerging conception of romantic love seems to have cleared this hurdle, inasmuch as its relationships with a wide array of psychological and sociological variables proved to be both abundant and reasonable. Correlational studies can also suggest causal hypotheses, but can rarely confirm them. When one takes it upon himself to stock a new product in social psychology's conceptual warehouse, however, he should also feel obliged to demonstrate that it has predictive utility. If it does not, it is doubtful that its contribution to our "understanding" of social behavior can be great enough to justify its existence. It is for this reason that a laboratory experiment was conducted, in which both dating couples and unacquainted opposite-sex pairs were put through a standard procedure, and in which behavioral predictions were made on the basis of their previously measured love scores.

A second, and equally important, reason for conducting the experiment was to extend the range of relationships involving love to behaviors

other than paper-and-pencil responses. I am in agreement with the view of Campbell (1963) and Sechrest (1969) that it is most profitable to consider "attitudes" as manifesting themselves in a wide range of behaviors with respect to the attitude object. The particular set of behaviors typically used to assess attitudes, those involved in filling out questionnaires, does not provide an adequate sampling of "everyday" attitude-relevant behavior. It was hoped that the experimental results would point to alternative methods of assessing love, as well as providing a test of the predictive validity of the love scale. The experiment included three major dependent variables, each of which tapped a category of behavior which was seen as being either directly or indirectly relevant to the emerging conception of love. These categories were visual behavior, time perception, and helping behavior. It was hypothesized, specifically, that members of dating couples who loved their partners a great deal would gaze into their partners' eyes more, would perceive time spent with their partners as passing more quickly, and would be more likely to help their partners than would members of dating couples who loved their partners to a lesser degree. There is an experimental literature concerned with each of these categories of behavior, and it was hoped that the present experiment, in the process of relating these behaviors to heterosexual attraction, would also contribute to these literatures.

The major tests of experimental predictions involved comparisons between "Strong Love" and "Weak Love" couples, as categorized by their scores on the love scale. Additional experimental groups were included in which subjects were paired not with their own boyfriends or girlfriends but with strangers. The love scores of the subjects in these "Apart" groups were equated with those of the subjects who were paired with their

own dating partners (the "Together" groups). The Apart groups were included for three reasons. First, in spite of the present conception of love as an attitude directed toward a particular other person, it remained possible (as suggested, for example, by Fromm) that strong and weak lovers differ from one another in their predispositions toward other people in general, or in their predispositions toward opposite-sex peers. Such differences in more general interpersonal response tendencies might underlie any obtained differences between Strong Together and Weak Together subjects on the dependent measures. The inclusion of the Apart groups, equated with the Together groups on love scores, made it possible to assess this alternative explanation of positive findings. Second, in at least one case, that of time perception, it seemed plausible to predict behavioral differences between the Strong Apart and Weak Apart groups in the direction opposite to those predicted between the Strong Together and Weak Together groups. Third, the hope of contributing to the existing experimental literatures on visual behavior, time perception, and helping behavior pointed to the potential value of comparing the behavior of acquainted and unacquainted couples, regardless of love scale scores.

Overview of Procedure

Subjects. Two pools of subjects (Ss) were established from among those non-engaged couples who completed the questionnaire. Those couples in which both partners scored above the median on the love scale (92 or higher) were designated Strong Love couples, and those in which both partners scored below the median were designated Weak Love couples. Couples in which one partner scored above and the other below the median were not included in the experiment. Within each of the two pools,

the couples were divided into two subgroups with approximately equal mean love scores. One subgroup in each pool was designated as a "Together" group, the other as an "Apart" group. Ss in the Together groups were invited to take part in the experiment together with their boyfriends or girlfriends. Ss in the Apart groups were requested to appear at the experimental session individually, where they would be paired up with other people's boyfriends or girlfriends. Pairings in the Apart conditions were made on the basis of scheduling convenience, with the additional guideline that women should not be paired with men who were younger than themselves. (It was necessary to violate this guideline in only two or three cases.) In this way, four experimental groups were created--Strong Together (19 pairs), Weak Together (19 pairs), Strong Apart (21 pairs) and Weak Apart (20 pairs).

The students contacted were typically eager to participate in the experiment, and, as a result, scheduling proved to be much easier than had been anticipated. Only five of the couples contacted refused to participate--two who had been pre-assigned to the Strong Together group, two to the Weak Together group, and one to the Strong Apart group. One additional couple was scheduled to participate in the Strong Apart condition but had to cancel out because of an injury to one of the partners. (These five couples are not included in the cell N's reported above.) No changes in the pre-assignment of Ss to groups were requested or permitted. As desired, none of the pairs of Ss created in the Apart conditions was previously acquainted. Each subject was paid \$1.25 for his participation in the hour-long session.

Sessions. The details of the experimental procedure will be presented in conjunction with the discussion of the three major dependent measures.

The following is a skeletal outline of the sessions, which were identical for all pairs, in which the dependent measures were embedded:

When both members of a scheduled pair had arrived at the laboratory they were seated across a table from one another in an observation room. The experimenter (E), a male graduate student, explained that the experiment was part of a study of communication among dating and unacquainted couples. First, the pair was to conduct a face-to-face discussion. Afterward they would be taken to separate rooms, from which they would have a second discussion over the intercom system. E explained that these two situations were of interest because they corresponded to situations which occur in real life. ("Sometime couples who are making various decisions are together, and can discuss the issue face-to-face. But at other times couples who have decisions to make are separated, often by large distances, and can communicate only by mail or by phone.") The Ss were also told that, in another attempt to mirror real situations, the remote discussion would be set up in such a way that there would be "unequal access to information"--one of the pair would know more than the other about the facts of the case to be discussed. The reason for this instruction will be explained later, when the procedure used to measure helping behavior is described.

After this introduction, the Ss were asked to read a paragraph about "a couple contemplating marriage" (one of the "choice situations" developed by Wallach and Kogan, 1959) and individually to check "the minimum probability of a successful marriage" which they would require before recommending that the couple take the plunge. They were told that they would subsequently discuss the case, and that the discussion would be recorded. After the Ss had indicated their choices, E told

them that it would take a few minutes for him to set up the tape recorder, and that meanwhile they could talk about anything except the case to be discussed. They would be told over the intercom when to begin the discussion, in which they were to discuss the pros and cons of the decision, with the goal of determining "what the best recommendation would be." E then left the room.

At this point a four-minute Waiting Period commenced, followed by a four-minute Discussion Period. During the latter three minutes of each of these periods (allowing one minute for adaptation to the situation in each case), the Ss' visual behavior was recorded. For all except the first 11 couples to participate, their conversation during these periods was tape recorded. At the close of the Discussion Period the Ss were asked to re-indicate their recommendations¹ and also to record their estimates of the time which had elapsed during each of the two time periods. The Ss were then escorted to separate cubicles, where they were first asked to complete a form (Form A) calling for their impressions of their partners and for a report of their mood during the discussion on sets of bipolar adjective scales.² At this point the procedure employed to measure helping behavior commenced, including the reading of part of a "case report" and an extended period of number-canceling.

¹This aspect of the procedure was included for the sake of credibility and, incidentally, to provide data on the effects of dyadic discussion on the riskiness of individual decisions (following the line of research initiated by Stoner, 1961). These data have not yet been analyzed. Informal examination of the tape-recorded discussions suggests that their value may be limited, however, because many of the couples misunderstood the nature of the decision to be made. (They thought they were to give their estimates of the likelihood of a successful marriage, rather than the minimum likelihood they would require before recommending that the couple get married.)

²This form and the other experimental materials are presented in Appendix B.

These proceedings will be described later. After the measure of helping had been obtained, the Ss filled out another form (Form B), calling for a report of their mood while reading the case report and canceling numbers, a reassessment of their partners, and an explanation of their decision to "help" or not to "help." Form B also included a series of open-ended questions designed to tap Ss' perceptions of the purposes of the experiment and to elicit the report of any suspicions which they might have entertained.

The Ss expected at this point to proceed to discuss the case report over the intercom. Instead the experiment was terminated, and the Ss were brought together again and fully debriefed. Finally they were paid and asked not to discuss the experiment with anyone else for several weeks. This request was particularly stressed in the cases of subjects in the Apart conditions whose own boyfriend and girlfriends had not yet participated. An attempt was made to minimize information leakage by scheduling boyfriends and girlfriends in the Apart conditions for sessions within the same two-day period (and, when possible, on the same day). When asked about it during the debriefing session, no subject reported having had prior knowledge about any of the critical details of the experiment. Several reported that they had asked their boyfriends or girlfriends about the experiment, but that the partners had refused to divulge any information.

Except for the introductory remarks before the start of the Waiting Period, all instructions to the Ss were on tape and transmitted over the laboratory intercom system. This technique virtually eliminated the possibility that differences between conditions might result from

unintended influence by E.³ In addition to this precaution, it was possible to conduct the scheduling in such a way that E, although he himself did the phone-calling, rarely knew whether the pair was in a Strong Love or Weak Love group. E could not avoid knowledge of whether the pair was in the Together or the Apart condition, however.

Figure 4 summarizes the course of the experimental session.

Visual Behavior

As noted in Chapter 2 (p. 48), looking at another person is a behavior which may be uniquely relevant to the emerging conception of romantic love. Looking may serve to reflect both affiliative need and concern for the other person. And, in particular, mutual looking (or "eye contact") seems to epitomize the exclusive, absorptive component of love which is prominently featured in the love scale. The theoretical grounding for this component is set forth most clearly in Slater's (1963) discussion of "dyadic withdrawal." Lovers are seen as threatening society by concentrating their interpersonal energies upon one another, to the exclusion of everyone else. This analysis accords well with the folk wisdom that people who are in love are always gazing into one another's eyes. An item based on this notion was included in the love scale: "Whenever I am with _____, I spend a good deal of time just looking at him (her)."

In light of these considerations, it was predicted that couples in the Strong Together condition would make more eye contact than would couples in the Weak Together condition. Because love is seen as reflecting

³During the first third of the experimental sessions there were occasional equipment malfunctions, necessitating the recourse to "live" transmission. But the crucial "helping" question was always presented on tape.

Setting	OBSERVATION ROOM	SEPARATE ROOMS
Events	Introductory instructions; <u>Ss</u> read choice problem Waiting Period (4 minutes) } Discussion Period (4 minutes)	Helping procedure (case report; number can-celling)
Measures	(Initial recommendations) Visual behavior; tape-recordings (during latter 3 minutes of each period) (Final recommendations); time estimates	Form A Helping measure; Form B

Figure 4. Course of the experimental session.

an attitude toward a particular other person, rather than a more general interpersonal response tendency, no difference in the amount of gazing indulged in by the Strong Apart and Weak Apart groups was expected. These predictions were seen as being most applicable to visual behavior during the unstructured Waiting Period. It was anticipated that during the more clearly task-oriented Discussion Period, factors related to the content of the discussion might determine visual behavior to a greater extent.

Measurement. The Ss' visual behavior during the latter three minutes of each of the two time periods was recorded by two observers who were stationed behind a one-way mirror, one facing each subject. Each observer pressed a button, which was connected to a cumulative clock, whenever the S he was watching was looking across the 52-inch table at his partner's face. The readings on these clocks provided measures of individual looking. In addition, a third clock was activated whenever the two observers were pressing their buttons simultaneously. The reading on this clock provided a measure of mutual looking. The reliability of the observations was checked several times during the course of the experiment by having pairs of observers make independent recordings of the visual behavior of the same person in a situation simulating that of the experimental session. The measure of inter-observer agreement was the percentage of time (during a three-minute period) that the two observers were simultaneously recording looking or non-looking. (The clock used to record mutual looking during the experimental sessions was well suited for the measurement of inter-observer agreement during the reliability checks.) The mean percentage agreement for the 12 reliability trials conducted was 92.8, and the median was 94.4.

Five undergraduate assistants served as observers for most of the sessions, and four graduate students filled in from time to time. The observers never knew whether a pair of Ss was in a Strong Love or Weak Love group. They were sometimes able to infer whether the pair was in the Together or the Apart condition, however. Each observer's assignment alternated between watching the woman and watching the man in successive sessions.

Results. Table 22 reports the means (in seconds) and standard deviation of the mutual looking measure for each of the four experimental groups during the two time periods.

TABLE 22
MUTUAL LOOKING

	WAITING PERIOD			DISCUSSION PERIOD		
	N	\bar{X}	SD	N	\bar{X}	SD
Strong Together	19	56.21	17.10	19	68.84	35.00
Weak Together	18 ^a	44.72	25.04	19	61.42	33.76
Strong Apart	21	46.71	29.59	21	54.24	22.08
Weak Apart	20	40.05	17.47	20	52.15	17.44

^aBecause of an equipment failure, the mutual looking measure was not obtained for one couple in the Weak Together group during the Waiting Period.

In the Waiting Period, as predicted, Strong Together couples made more eye contact than Weak Together couples ($t = 1.52$, $p < .07$, 1-tailed).⁴ Although there was a tendency for Strong Apart couples to

⁴This t value refers to the simple effect of the Strong-Weak factor among the Together couples and makes use of the error term obtained in the 2 x 2 analysis of variance (Winer, 1962, p. 244). If, instead, a t test making use of the variances of the Strong Together and Weak Together cells alone is employed, the result is virtually identical ($t=1.64$, $p < .06$, 1-tailed). The simple-effect t will be reported in the other such comparisons presented below.

make more eye contact than Weak Apart couples, it is not a reliable one ($\underline{t} = .92$). Unweighted-means shows that the main effect of the Strong-Weak factor falls slightly short of significance ($\underline{F}_{1,74} = 3.02, p < .10$).

In the Discussion Period, the pattern of means is quite different. Although there is a tendency for Strong Together couples to engage in more mutual looking than Weak Together couples, it is not a significant one ($\underline{t} = .88$). But there is a marginally significant main effect of the Together-Apart factor ($\underline{F}_{1,75} = 3.63, p < .07$). That is, the real couples make more eye contact than the unacquainted couples, regardless of the level of love. It is also worth noting that the standard deviations of the mutual looking scores are considerably greater for the Together groups than for the Apart groups during the Discussion Period. Inspection of the data revealed that two of the Strong Together and two of the Weak Together couples made less than 10 seconds of eye contact during the Discussion Period, and three of the Strong Together and one of the Weak Together couples made more than 100 seconds of eye contact during this period. The eye contact measure for all couples in the two Apart conditions, on the other hand, were between 10 and 100 seconds.

Table 22 also indicates that in all experimental conditions there was considerably more mutual looking in the Discussion Period than in the Waiting Period (\underline{t} for matched pairs = 3.78, $p < .01$, 2-tailed). It was also found that there was at least some consistency across situations in couples' mutual looking patterns. The correlation across all couples between mutual looking during the Waiting Period and mutual looking during the Discussion Period is .415 ($p < .01$).

Another approach toward assessing the amount of gazing engaged in by the couples is to consider the proportion of total individual looking

time which was occupied by mutual looking. The measure of mutual looking is equivalent to the intersection of two sets of visual behavior --the woman's looking at the man's face and the man's looking at the woman's face. The obtained recordings of individual looking also make it possible to compute the union of these two sets. This is equal to the woman's individual looking score plus the man's looking score minus the mutual looking score. The proportion generated by dividing the mutual looking measure by this measure of total individual looking may be considered to be a measure of mutual focus. This measure differs from mutual looking in that it specifically takes into account the individual looking tendencies of the two partners. It is possible, for example, that neither member of a particular pair looked very much at his partner, but that whenever one of them did look, the other looked back. Such a couple would have a low mutual looking score but a high mutual focus score. Within certain limits, the converse of this situation is also possible. No advance prediction was specifically made with respect to this measure, and it is, of course, not independent of the measure of mutual looking. Nevertheless, it may be that comparisons among the experimental groups with respect to their degree of mutual focus will help us to interpret the differences in mutual looking already reported. The means and standard deviations of the four experimental groups are presented in Table 23. The obtained proportions were multiplied by a constant factor of 100, so that the potential range of mutual focus scores is from 0 to 100. The actual range of scores was from 15.4 to 66.5 during the Waiting Period and from 1.6 to 85.8 during the Discussion Period.

TABLE 23

MUTUAL FOCUS

	WAITING PERIOD			DISCUSSION PERIOD		
	N	\bar{X}	SD	N	\bar{X}	SD
Strong Together	19	43.98	9.76	19	45.34	18.81
Weak Together	18	34.73	14.01	19	41.67	17.82
Strong Apart	21	35.27	14.63	21	36.97	11.18
Weak Apart	20	32.52	9.42	20	34.59	10.35

Note.--Mutual Focus = $100 \times \frac{\text{Mutual Looking}}{\text{Woman's Looking} + \text{Man's Looking} - \text{Mutual Looking}}$

As necessitated by the nature of the two measures, the overall pattern of means on the measure of mutual focus parallels rather closely the pattern of means on the mutual looking measure. In the case of mutual focus, however, the simple effect of the Strong-Weak factor among the Together groups during the Waiting Period is stronger than it was in the case of mutual looking ($t = 2.31$, $p < .02$, 1-tailed). The effect of the Strong-Weak factor among the Apart groups is clearly not significant ($t = .72$). The analysis of variance of the Waiting Period results showed that both main effects are significant (for the Strong-Weak factor $F_{1,74} = 4.73$, $p < .05$; for the Together-Apart factor $F_{1,74} = 3.94$, $p < .05$). Inspection of the means makes it apparent that both of these effects are largely due to the greater degree of mutual focus in the Strong Together group than in the other three groups.

In the Discussion Period, the results are quite similar to those with respect to mutual looking. There is significantly greater mutual focus in the Together groups than in the Apart groups ($F_{1,75} = 5.26$, $p = .025$).

Neither the main effect of the Strong-Weak factor ($F < 1$) nor either of the individual comparisons approach significance.

Finally, before discussing these results, it will be useful to consider the individual looking scores of Ss in the four experimental groups. These data are presented in Table 24.

TABLE 24
INDIVIDUAL LOOKING

WAITING PERIOD							
	WOMEN			MEN			r^a
	N	\bar{X}	SD	N	\bar{X}	SD	
Strong Together	19	98.68	23.18	19	83.68	20.24	.197
Weak Together	19	87.37	30.38	19	77.68	33.12	.368
Strong Apart	21	94.48	39.72	21	75.05	39.30	.468*
Weak Apart	20	96.85	27.79	20	63.95	25.21	.336
DISCUSSION PERIOD							
	WOMEN			MEN			r^a
	N	\bar{X}	SD	N	\bar{X}	SD	
Strong Together	19	108.90	37.89	19	99.95	33.47	.784**
Weak Together	19	101.53	34.01	19	96.42	40.55	.468*
Strong Apart	21	112.67	25.29	21	83.86	31.29	.100
Weak Apart	20	115.85	26.58	20	85.70	29.05	-.354

* $p < .05$ (2-tailed)

** $p < .01$ (2-tailed)

^aCorrelation between the looking scores of the two partners.

Examination of the mean scores reveals, first of all, that in both time periods and in all experimental groups, the women spent much more time looking at the men than the men spent looking at the women. Secondly, the difference between women's and men's looking time is greater among

the unacquainted couples (the Apart groups) then among the dating couples (the Together groups), particularly during the Discussion Period. Separate analyses of variance for the two time periods showed that the main effect of the Sex factor was highly significant in both the Waiting Period ($F_{1,150} = 15.38, p < .01$) and the Discussion Period ($F_{1,150} = 12.46, p < .01$). The interaction between Sex and the Together-Apart factor was significant in the Discussion Period ($F_{1,150} = 4.71, p < .05$), but not in the Waiting Period ($F_{1,150} = 1.98$). There were no other significant effects. Inspection of the means does reveal that for both sexes in the Waiting Period and for women in the Discussion Period, Strong Together Ss looked at their partners somewhat more than did Weak Together Ss. None of these individual comparisons is statistically reliable, however. Even when the two partners' individual looking scores are summed to form a "total looking" index for each pair, the differences between the Strong Together and Weak Together groups in both time periods fall short of significance. The pattern of correlations between the looking scores of the two partners, also presented in Table 24, will be discussed below.

Discussion. The main prediction made with respect to visual behavior was confirmed. During the Waiting Period, couples who were strongly in love spent more time gazing into one another's eyes than did couples who were only weakly in love. Since there was no difference between the mutual looking scores of the Strong Apart and Weak Apart groups, it must be concluded that this result reflects the Ss' attitudes toward their dating partners, rather than more general interpersonal response tendencies associated with love scores. With respect to the measure of individual looking, however, the tendency for Strong Together Ss to

spend more time looking at their partners than did the Weak Together Ss was not significant for either women or men. This finding indicates that the obtained difference in mutual looking between these two groups during the Waiting Period must be attributed to differences in the patterning, as well as in the sheer quantity, of looking. This conclusion is bolstered by the fact that the clearest difference between the Strong Together and Weak Together groups emerged with respect to the measure of mutual focus.

In terms of their implications for the emerging conception of love, these results suggest to me that the greater amount of mutual looking among the Strong Together couples reflects most directly the exclusive and absorptive aspect of love. If gazing were primarily a manifestation of lovers' affiliative and dependent needs or of their concern for one another, then I would expect to find a clear excess in the sheer quantity of looking among the Strong Together couples. To the extent that looking serves to gratify one's affiliative need by reassuring him that his lover is nearby, this function should be served regardless of whether or not his lover happens to be looking back at him. Similarly, it should not be necessary for one's looking to be reciprocated for it to serve the function of ascertaining whether the object of one's love is in need of assistance. To be sure, the return of one's glance may enhance each of these functions to some extent. If one observes his lover looking at him it may serve to gratify his need to know that his lover is, in fact, looking after him. And looking which manifests concern for one's lover is probably most useful at times when the lover is looking back, thereby making it easier to monitor his facial expressions. Nevertheless, the finding that the difference between Strong Together and Weak Together

couples centers upon the mutuality, rather than the quantity, of looking brings to mind the absorptive nature of the mutual glance. When two people are looking into one another's eyes, they have established a peculiarly private communicative bond. No third party can look directly into the eyes of either of the lovers while they are making eye contact.

The excess in mutual looking and in mutual focus among the Strong Together group relative to the Weak Together group was not found in the Discussion Period, however. Instead, there was a main effect of the Together-Apart factor, with both Strong Together and Weak Together couples making more eye contact than did the unacquainted couples. In the Discussion Period, moreover, the variance of the mutual looking measure was considerably greater among the Together groups than among the Apart groups. The difference in the patterns of visual behavior obtained during the two time periods should be considered in light of the nature of the instructions preceding each of them. The Waiting Period was totally unstructured--the Ss were simply to sit and wait for the instruction to begin the discussion. Although visual behavior was not recorded for the first minute of waiting, many Ss continued to look curiously or uneasily around the room during the Waiting Period. It seems reasonable that the relatively strong exclusive and absorptive orientation of the Strong Together couples should have manifested itself most clearly during this unstructured period. The individual looking results suggest that the Strong Together Ss spent almost as much time looking around the room or down at their tables as Ss in the other three groups. But when a Strong Together S looked at his partner, it tended to be at the same time that his partner was looking at him. And once their eyes met, the Strong Together couples apparently maintained eye

contact for longer intervals than did couples in the other three groups.

The Discussion Period, in contrast, was clearly task-oriented. The Ss were to discuss the case of "a couple contemplating marriage" and to decide what course of action to recommend to this hypothetical couple. Since verbal interaction was specifically required in the Discussion Period, it is not surprising that there was more mutual looking among all experimental groups in the Discussion Period than in the Waiting Period. The communicative function of eye contact during the Discussion Period, necessitated by the demands of the task, probably overshadowed the role of eye contact as a manifestation of interpersonal absorption. The tendency for both Together groups to make more eye contact than both Apart groups during the Discussion Period may be seen, instead, as a straightforward reflection of the greater familiarity of Ss in the Together groups with one another. The finding of greater variance in the mutual looking scores of the Together couples during the Discussion Period may also reflect their greater familiarity. It may be speculated that although dating couples feel free to stare at each other either practically all of the time or practically not at all during a conversation, norms of politeness prevent unacquainted couples from adopting either of these extreme visual strategies.

The finding that in both time periods women spent more time looking at their partners than men was not specifically anticipated. It seems reasonable, however, in light of the frequently reported tendency of women to specialize in "social-emotional" aspects of interaction and of men to specialize in the "task-related" aspects of interaction (e.g., Strodtbeck & Mann, 1956). Looking may serve as a vehicle of social-emotional expression for women, and, in addition, may allow women to

obtain cues from their male partners concerning the appropriateness of their behavior. Previous research has shown that women make more eye contact than men do in same-sex groups (Exline, 1963) and in an interview situation, regardless of the sex of the interviewer (Exline, Gray, and Schuette, 1965). The present study extends this finding to unacquainted and acquainted opposite-sex dyads, in both an unstructured and a task-oriented time period.

During the Discussion Period the tendency for women to look at men more than vice-versa was greater among the Together groups than among the Apart groups. This interaction effect may be considered in conjunction with the correlations between the two partners' individual looking scores presented in Table 24. In the Together groups, looking appears to have been highly reciprocal. The intra-couple correlation within the combined Together groups is .64 ($p < .001$, 2-tailed). In the combined Apart groups, on the other hand, the intra-couple correlation is -.12. There is clearly no reciprocity of looking during the Discussion Period among these unacquainted pairs. Taking all of these data together, it may be suggested that in a task-related situation, sex-role specialization tends to be greater among previously unacquainted pairs than among dating couples. In the latter case the two participants are more likely to be equal partners in interaction, as reflected both by the smaller sex differential in looking scores and by the reciprocal nature of their looking. It is possible, moreover, that during much of the time that the women were looking, the men were talking. Such an interpretation would be congruent with Heiss's (1962) finding that among dating couples participating in laboratory discussions sex-role specialization (as measured by Bales's indices) was greatest among "casual daters" and least among

"committed" couples. The data on individual looking do not reflect such differences in degree of sex-role specialization between the Strong Together and the Weak Together couples in the present study, but do suggest such differences with respect to the comparison between dating (Together) and unacquainted (Apart) couples.

An internal check on the validity of the above interpretation may be provided by recourse to the measures of the amount of time each partner talked during the Waiting and Discussion Periods. This measure was obtained from the tape recordings of the sessions by a coder who did not know which experimental group each couple represented. These scores (based upon the same three-minute periods as the looking measures), together with the correlations between the woman's talking time and the man's talking time across couples, are presented in Table 25. The cell frequencies in Table 25 are smaller than those in Table 24 because the tape recordings were not instituted until after the first 11 sessions had been conducted and because in several other instances E inadvertently forgot to turn on the tape recorder.

In the Waiting Period the data reveal a dramatic interaction between the subject's sex and the Together-Apart factor ($F_{1,127} = 8.02, p < .01$).⁵ During this unstructured three-minute period, women live up to their reputation of being the more talkative of the sexes if they are together with their boyfriends. When the partners are unacquainted, however, the men seem to take charge of the unfamiliar situation by assuming the conversational lead. When the situation changes from an unstructured one

⁵For convenience in analyzing these data, the results were collapsed across the Strong-Weak factor, and a 2 X 2 unweighted means analysis of variance performed for each of the two time periods. It is recognized that the assumptions of independence underlying the analysis of variance are not met, since the amount of time one partner talks places severe restrictions upon the amount of time the other can possibly talk.

TABLE 25
TALKING TIME

WAITING PERIOD							
	WOMEN			MEN			r^a
	N	\bar{X}	SD	N	\bar{X}	SD	
Strong Together	17	45.82	15.74	17	34.65	13.28	-.153
Weak Together	13	46.00	23.40	13	44.31	19.65	-.089
Strong Apart	19	40.58	15.16	19	54.21	26.46	.194
Weak Apart	15	40.60	20.00	15	51.27	19.39	-.371

DISCUSSION PERIOD							
	WOMEN			MEN			r^a
	N	\bar{X}	SD	N	\bar{X}	SD	
Strong Together	18	72.72	22.26	18	80.28	26.89	-.594*
Weak Together	14	80.07	25.02	14	81.93	22.87	-.821*
Strong Apart	19	73.32	19.23	19	90.90	24.06	-.741*
Weak Apart	15	76.80	28.32	15	81.80	26.19	-.778*

* $p < .01$ (2-tailed).

^a Correlation between the two partners' talking time.

to a task-oriented one, the men tend to talk more in all groups. The only significant effect obtained in the Discussion Period is the main effect of sex ($F_{1,124} = 4.12, p < .05$). It would also be expected, in light of our earlier interpretation of the individual looking data, that the predominance of male talking during the Discussion Period would be greater in the Apart groups than in the Together groups. But this expectation is not borne out by the data. Although the pattern of means reveals a slight tendency for the sex differential to be greater in the Apart groups, the relevant interaction falls far short of significance ($F < 1$). All in all, then, the measure of talking time, limited in its potential usefulness by reduced cell frequencies, provides some support for the interpretation of the individual looking results in terms of sex-role specialization, but this support is neither conclusive nor unambiguous.

I will conclude the presentation of results related to visual behavior by reporting a set of correlations which, although they are of only marginal statistical significance, contain some interesting suggestions about the contrasting implications of love for the two sexes. One of the dimensions on which all Ss rated their partners following the Discussion Period was defined by the adjective pair "GOOD-LOOKING - BAD-LOOKING." As might be expected, both men and women in the Together conditions considered their partners to be considerably better-looking than did men and women in the Apart conditions. The ratings of Ss in the Together conditions were near the upper limit of the scale (all means were equal to 8.0 or more on the nine-point scale). The means in the Apart groups were closer to the midpoint of the scale, however, making it possible to test the prediction that the amount of time one looks at

his partner will be positively related to his evaluation of the partner's looks. The relevant correlations for Ss in the Apart conditions are presented in Table 26.

TABLE 26
CORRELATIONS BETWEEN RATINGS OF PARTNERS' LOOKS
(FORM A) AND INDIVIDUAL LOOKING
(APART GROUPS ONLY)

	WOMEN	MEN
Strong Apart: Waiting Period	-.369*	.069
Discussion Period	-.315	.212
Weak Apart: Waiting Period	-.127	.394*
Discussion Period	-.050	.475**

* $p < .10$ (2-tailed).

** $p < .05$ (2-tailed).

One interpretation of this pattern of correlations is that when a man is only weakly in love with his own girlfriend, the longer he looks at another girl, the better-looking she seems to be. But when a woman is strongly in love with her boyfriend, the longer she looks at another man the uglier he becomes in her eyes. An alternative explanation, which I prefer, is that men who are only weakly in love with their own girlfriends tend to look at good-looking girls. Women who are strongly in love with their own boyfriends tend to avoid looking at good-looking guys. (What better way to avoid temptation?) But I shall leave it to the reader to draw his (or her) own conclusions.

Time Perception

Popular culture has it that when a person is in the company of someone he loves, time seems to "fly." An extreme instance of this sort of perceptual distortion was reported by an author of the Old Testament: "And Jacob served seven years for Rachel; and they seemed unto him but a few days, for the love he had to her" (Genesis, 29:20). Although the experimental literature seems to pale in significance in the face of this Biblical report, it is worth noting that several studies have found that people tend to overestimate the duration of elapsed time when they are bored or passive and to underestimate it when they are interested or active (e.g., Loehlin, 1959; Geiwitz, 1964). Since the emerging conception of love makes reference to the focusing of interpersonal attention upon the object of one's love, it was predicted that subjects in the Strong Together condition would perceive the duration of the Waiting and Discussion Periods to be shorter than would subjects in the Weak Together condition. It was also predicted (albeit less confidently) that there would be a reverse effect in the Apart conditions. It seemed likely that people who are strongly in love with their own boyfriends or girlfriends would be less interested and involved in their encounters with some other person of the opposite sex than would people who are only weakly in love. Accordingly, the prediction was made that Strong Apart Ss would estimate the duration of the Waiting and Discussion Periods as being longer than would Weak Apart Ss.

Measurement. At the conclusion of the Discussion Period, the Ss were requested (via a tape recording piped into the observation room) to indicate, on slips of paper provided for the purpose, their individual

estimates of the amount of time that had elapsed during the Waiting Period ("from the time I left the room until the time I told you to start the discussion"). After they had done this, they were asked to do the same for the Discussion Period ("from the time I told you to start the discussion until the time I told you to stop the discussion"). Following Loehlin's (1959) procedure, they were asked to make these estimates to the nearest ten seconds. Before the requests were made, the Ss were cautioned not to consult their watches or each other. The observers noted that these cautions were occasionally disregarded, but no systematic record was kept of such violations. The actual length of each of the two time periods was four minutes. In five cases, unfortunately, the Discussion Period was allowed to continue for more than four minutes because of equipment malfunctions or human error. The time estimates of those five couples (one in the Strong Together condition and four in the Weak Together condition) are not included in the results.⁶

Results and discussion. To reduce the extreme positive skewness of the distributions of estimates, all scores (in seconds) were transformed to their logarithms. The means and standard deviations of these transformed scores for each of the two time periods are presented in Table 27.

⁶In no case did these errors affect the recording of visual behavior. E always remembered when to instruct the observers to stop observing, even when he was unable to tell the Ss to stop talking.

TABLE 27

TIME ESTIMATES

WAITING PERIOD						
	WOMEN			MEN		
	N	\bar{X}	SD	N	\bar{X}	SD
Strong Together	18	2.454	.214	18	2.366	.215
Weak Together	15	2.481	.211	15	2.442	.195
Strong Apart	21	2.440	.187	21	2.394	.208
Weak Apart	20	2.407	.245	20	2.371	.237

DISCUSSION PERIOD						
	WOMEN			MEN		
	N	\bar{X}	SD	N	\bar{X}	SD
Strong Together	18	2.457	.167	18	2.485	.188
Weak Together	15	2.471	.154	15	2.449	.167
Strong Apart	21	2.411	.195	21	2.518	.153
Weak Apart	20	2.437	.166	20	2.470	.137

Note.--Scores are logarithms of time estimates (in seconds).

Consideration of these data can, unfortunately, be dispensed with in short order. Analyses of variance show no significant or near-significant effects in either of the two time periods. Whatever effects the experimental variations might have had on particular S_s ' time estimates, they were totally engulfed by the extremely large amount of inter-individual variation. It is, in fact, because individual differences in time perception are so great that virtually all research in this area makes use of within-individual rather than between-individual comparisons.

That there is some consistency in individual time perception across situations was demonstrated in the present study at least for women. Combining Ss in the four groups, the correlation between estimates of the Waiting Period and of the Discussion Period was .44 for women ($p < .01$), but only .19 for men (ns). In spite of the lack of consistency among men's time estimates, there was a general tendency for men to perceive the Discussion Period as longer than the Waiting Period. Forty-five of the men gave larger estimates for the Discussion than for the Waiting Period, and 24 gave larger estimates for the Waiting Period ($\chi^2 = 5.80, p < .02$). There was no such tendency among the women: 35 perceived the Discussion Period as longer, and 32 perceived the Waiting Period as longer. (The remaining Ss gave identical estimates for the two time periods.) Since individual time estimates did not correlate appreciably with any other measured variables, however, it is difficult to assess the import of this apparent sex difference. Finally, it may be noted that the logarithm of the actual duration of each of the two time periods (four minutes) is 2.380. Inspection of the means in Table 27 reveals that, on the whole, Ss tended to overestimate both time periods.

The predictions made with respect to time perception were based on the notion that Strong Together Ss would tend to be more involved in the proceedings (and with their partners) than Weak Together Ss, and that, if anything, this tendency would be reversed among the Apart Ss. Although no such tendencies were reflected by the Ss' time estimates, it may be of interest to examine the Ss' direct reports of their involvement in the discussion, which were called for on Form A. (No data were obtained concerning Ss' moods during the Waiting Period.) These reports

were scored on a scale ranging from 1 ("NOT INVOLVED") to 9 ("INVOLVED") and are summarized in Table 28.

TABLE 28
REPORTED INVOLVEMENT IN DISCUSSION

	WOMEN			MEN		
	N	\bar{X}	SD	N	\bar{X}	SD
Strong Together	19	7.05	1.35	19	6.84	1.77
Weak Together	19	6.53	2.24	19	5.79	2.12
Strong Apart	21	6.48	1.72	21	6.29	1.74
Weak Apart	20	6.00	2.10	20	5.75	1.62

Analysis of variance of these data reveal one main effect, and it is for the Strong-Weak factor ($F_{1,150} = 4.83, p < .05$). That is Ss who are strongly in love with their own boyfriends or girlfriends tend to report greater involvement in the discussion than Ss who are weakly in love with their own boyfriends or girlfriends, regardless of whether their partner in the discussion is their real-life partner or someone else. There were also tendencies for Together Ss to report greater involvement than Apart Ss and for women to report greater involvement than men, but neither of these effects approach significance (F 's are 1.38 and 2.07 respectively). The obtained effect may be interpreted in at least two ways. First, it may be that Strong Love Ss have marriage on their minds to a greater extent than do Weak Love Ss, and, therefore, a discussion concerning "a couple contemplating marriage" is intrinsically more involving to them, regardless of whom the discussion is with. Only slight support for this interpretation is obtained, however, by inspecting

the correlations across all subjects between reported involvement in the discussion and estimated probability of marriage to one's boyfriend or girlfriend (as reported on the original questionnaire). This correlation is .26 for men ($p < .05$), but only .13 for women. A second interpretation, which cannot be entirely discounted, is that Strong Love Ss have a general tendency to make use of the positive extremes of self-report scales. It was found, in fact, that on many (although certainly not all) of the self-reports obtained on Forms A and B, the mean differences between the Strong Apart and Weak Apart groups were in the same direction as those between the Strong Together and Weak Together groups. The possibility of such general response tendencies serves to re-emphasize the need to go beyond paper-and-pencil measures in the assessment of interpersonal attitudes.

In any case, the rationale for predicting between-group differences in time perception is not supported by the self-report data. The correlations between estimates of the duration of the Discussion Period and self-reports of involvement in the discussion were close to zero for both sexes.

It may be noted, finally, that among the male Ss, reported involvement in the discussion was significantly correlated with the amount of time the S talked during the discussion ($r = .26$, $p < .05$). Among female Ss, however, there is no such relationship ($r = -.03$). To suggest explicitly that the amount of time a woman spends talking bears no relation to her degree of involvement in the topic of conversation would be cruel and unnecessary, and, therefore, I will not do so.

Helping

Subjects assumed to be strongly in love in the present research were those who tended to agree wholeheartedly with such statements as the following:

"I would do almost anything for _____ [my boyfriend or girlfriend]."

"One of my primary concerns is _____'s welfare."

"If _____ were feeling badly, my first duty would be to cheer him (her) up."

Weak Love Ss, on the other hand, were those who had been more qualified in their endorsement of these items. The object of the third portion of the laboratory experiment was to provide a behavioral check upon these reported dispositions. A situation was set up in which each S had an opportunity to make a personal sacrifice for the sake of his partner. It was predicted that a larger proportion of Strong Together than Weak Together Ss would choose to "help" their partners. No difference in the proportion of helpers in the Strong Apart and Weak Apart groups was expected.

In the past several years a large number of studies concerned with helping behavior have been conducted by Berkowitz and others (e.g., Berkowitz & Daniels, 1963; Daniels & Berkowitz, 1963; see review by Midlarsky, 1968). The most general conclusion of these studies is that there is a moral "norm of responsibility" which dictates that people should help those who are in need of help. Daniels and Berkowitz (1963) also found that experimental Ss helped their partners most when the partner was both liked by the S and perceived as highly dependent upon the S for assistance. In the Berkowitz procedure, Ss ("workers") construct paper boxes or envelopes in order to increase their partners'

("supervisors") chances of winning a monetary prize. Precautions are taken to insure that productivity is not motivated by the desire for personal gain. Ss are typically told that their partners will not learn of the extent of their help, and that they will not meet their partners at the end of the session. Therefore, productivity cannot be motivated by the desire to gain the partner's approval or to avoid his censure, and may instead be seen as a measure of untarnished helping.

Although it is not clear that a meaningful conception of "helping" need exclude all possible forms of self-interest, it nevertheless seemed desirable in the present instance to devise a measure of helping which would be relatively unaffected by such considerations as impression-making or monetary gain. The use of dating couples presents special problems in this regard. For example, the precaution of telling the Ss that they will never meet their partners clearly cannot be taken. Similarly, the use of monetary prizes is ruled out because many couples may pool their resources to some extent. An additional consideration to be taken into account was the desire to minimize the effects of sex-role expectations. Such procedures as having S decide whether he or his partner would receive a series of electric shocks (e.g., Lerner & Lichtman, 1968) were therefore considered to be inappropriate. The procedure which was finally arrived at involved a "behavioroid" measure (cf. Aronson & Carlsmith, 1968) analogous to the shock-option procedure employed by Lerner and Lichtman. A "behavioroid" measure is one which stands midway between an actual behavioral measure (e.g., constructing paper boxes) and a verbal measure (e.g., responses to love-scale items), in that it represents a firm commitment to perform a specific behavior. The commitment employed as a measure of helping in the present study was to continue

to perform a boring task (canceling numbers), thereby allowing one's partner to return to a more interesting activity.

Measurement. After the Ss had been escorted to private rooms and had completed Form A, they were instructed (over the intercom) to begin reading a case report which was in a folder in front of them. The case, which the couple was presumably to discuss afterward over the intercom, had been excerpted from a volume on Neurotic Interaction in Marriage (Gomberg, 1956, pp. 272-279), and, as the Ss' self-reports later confirmed, was quite interesting and involving. After one minute, enough time for the average S to read no more than half the case material, the Ss were told to close their folders and given the following instruction:

Now, before we start the discussion this time, we're purposely interposing another task. Until you hear from me again, both of you will work on this task. At that point, one of you will get back to the case report, while the other works on the task for a while longer. In this way, we'll be able to vary the amount of familiarity that the two of you have with the case material. [This was in line with the previously stated desire to create "unequal access to information."] But just before we begin the discussion, both of you will have a chance to look back at the case material.

E explained that the task involved canceling all the 3's and 5's on sheets of paper stacked in front of the Ss, and that they should proceed from one sheet to the next until being told to stop. In order to minimize any interest which the Ss might conceivably find in this task, they were told that "Obviously, we're not particularly interested in how good you are at canceling numbers--the task itself is of no particular importance. But I'd still like you to work at it quickly and accurately." The Ss were then left to cancel numbers for 12 minutes. At the end of that period, the following message was transmitted to each S:

Now I'm connected only with you in Room Number One. A sign labeled "Room 1" was prominently displayed in each room. At this point, one of you will keep canceling for a while longer, while the other gets back to the case material. So, since you're in the first room, I'll just let you decide for both of you. If you want to keep canceling, let me know right now by pushing the button on the wall, and if you want to get back to the case, then just don't push the button.

The operational definition of "helping" was the act of pushing the button, thereby committing oneself to more number-canceling and freeing one's partner to return to the case report. After this measure was obtained the Ss were instructed to complete Form B, and the experiment was then terminated and the Ss debriefed.

Effectiveness of the Manipulations. One of the questions on Form B asked the Ss to indicate how much of the case report they had had a chance to read. On a scale on which "2" indicated that one had read 25 to 50 percent of the case and "3" indicated that one had read 50 to 75 percent of the case, the mean report was 2.19 for women (SD = .56) and 2.14 for men (SD = .60). Only five Ss (two women and three men) indicated that they had read 75 to 100 percent of the report.

Table 29 presents the means of Ss' reports (on Form B) of their moods while reading the case report and while canceling numbers, on scales which ranged from 1 to 9. Inspection of these means reveals that, as desired, Ss felt considerably less involved and interested, somewhat less comfortable, and substantially more irritated while canceling numbers than they did while reading the case report. In addition, the average rating of how much they had enjoyed canceling numbers was well below the midpoint of the scale, whereas the average rating of how much they expected to enjoy finishing the report was well above the midpoint.

TABLE 29

SUBJECTS' REPORTED MOODS WHILE READING CASE REPORT
AND CANCELING NUMBERS

	WOMEN		MEN	
	CASE ^a	TASK ^a	CASE ^a	TASK ^b
Involved (vs. Uninvolved)	6.13	3.54	5.61	4.23
Comfortable (vs. Uncomfortable)	7.20	6.48	7.06	6.06
Interested (vs. Uninterested)	7.28	2.37	6.52	2.88
Relaxed (vs. Tense)	7.25	7.02	7.14	6.73
Not irritated (vs. Irritated)	7.62	5.43	7.47	5.26
Not embarrassed (vs. Embarrassed)	8.35	8.47	8.39	8.38
How much did you enjoy doing the number-canceling task?		2.58 ^b		3.17
How much do you think you will enjoy reading the rest of the Case Report?	7.17 ^b		6.32	

^aN = 79

^bN = 78

Only 20 of 156 Ss (12 men and 8 women) who answered both questions reported that they enjoyed the canceling task as much or more than they expected to enjoy finishing the case. It seems, therefore, that the desired conflict was created, in which each S had to decide whether to continue to perform an unpleasant task, thereby liberating his partner, or to return to a more interesting activity, thereby subjecting his partner to continued drudgery.

There is also, of course, the question of whether the Ss believed the situation to correspond to the way it was represented to them. Some Ss, particularly those who had taken courses in psychology (cf. Rubin & Moore, 1968), might have suspected that their decision would not, in fact,

be put into effect, and some might have had insight into the real purpose of the ostensibly innocuous choice. Data bearing upon this question will be considered later, in conjunction with a discussion of the Ss' stated reasons for their choices.

Results and discussion. Table 9 summarizes the Ss' responses to the "helping" question. Inspection of these frequencies makes it clear,

TABLE 30
NUMBER OF SUBJECTS WHO DID AND DID NOT HELP

	WOMEN		MEN	
	<u>YES</u>	<u>NO</u>	<u>YES</u>	<u>NO</u>
Strong Together	8	11	4	15
Weak Together	5	14	5	14
Strong Apart ^a	1	20	6	14
Weak Apart	3	17	2	18
Combined Together	13	25	9	29
Combined Apart	4	37	8	32

^aBecause of E's failure to transmit the "helping" request at the right time, the choice of one male S in the Strong Apart group had to be omitted.

first of all, that the overall proportion of helpers (21.6 percent of all Ss) was much lower than what would have been optimal.⁷ This low overall helping rate minimized the possibility of obtaining reliable

⁷In retrospect, this failure can be accounted for to some extent. During pre-test sessions, when the helping rate had been, as desired, approximately 50 percent, E had entered the private rooms to ask the "helping" question. It may be that the perceived "demand" (Orne, 1962) to choose the less pleasant activity was greater as a result of this face-to-face procedure than it proved to be when the question was asked over the intercom.

between-group differences in the proportion of helpers. It may be seen, specifically, that the differences in helping rate between the Strong Together and Weak Together groups and between the Strong Apart and Weak Apart groups are either trivial or highly unreliable. Thus, the major prediction that a larger proportion of the Strong Together Ss than of the Weak Together Ss would choose to help their partners was clearly not confirmed. One significant difference in helping rates did emerge, however, and this involved an interaction between the S's sex and the Together-Apart factor. As the combined frequencies presented in the lower portion of Table 30 indicate, the proportion of men making the helping response was approximately the same in the Together and the Apart groups. Among women, on the other hand, a significantly higher proportion helped their partner when he was their boyfriend than when he was a stranger ($\chi^2 = 5.61, p < .025$).

This effect suggests that the attempt to devise a measure of helping which would not be overly influenced by sex-role expectations was not entirely successful. A constant proportion of about one-fifth of the men helped their partners, be they girlfriends or strangers, perhaps because of the notion that it would be the "polite" thing to do. But an appreciable number of women helped their partners only when their partners were also their boyfriends. This difference also suggests that helping on the part of men might be rooted in motives different from those underlying "helping" on the part of women. Specifically, it should be noted that by "helping," a S is also creating a situation in which he (or she) will have less information than his (or her) partner in the ensuing discussion. Perhaps some women who are paired with their boyfriends consider this state of affairs, in which the boyfriend will be

cast in the more knowledgeable, or dominant role in the discussion, to be desirable.

To assess the validity of this interpretation, the Ss' stated reasons for their choice, as reported in response to an open-ended question on Form B, were coded. Two separate sets of coding categories were established, one for those Ss who had chosen to continue to cancel numbers (the "yes" responses) and one for those Ss who had chosen to return to the case report (the "no" responses). The categories, and the definitions utilized by the coders, were as follows:

"Yes" Responses

1. Helping. Consideration of other's preference to stop canceling or to finish reading the story. Must mention the other person.
2. Relative information. Wants partner to have more information and/or to take dominant role in the discussion, without taking into account the partner's own desires.
3. Task preference. Prefers canceling numbers to reading the story, and does not take into account either partner's desires or relative information.
4. Other. Any reasons not codable into one of the above categories.

"No" Responses

1. Suspicion. Thought, or considered the possibility, that partner had already stopped canceling, or entertained some other relevant suspicion.
2. Rationalization. Takes into account negative consequences for other, and offers some justification for decision.
3. Relative information. Wants to have more information and/or to take dominant role in the discussion.
4. Task preference. Prefers reading story and/or dislikes canceling numbers. Makes no mention of other person.
5. Considered task preference. Takes into account negative consequences for other, but says that this was outweighed by task preference.
6. Other. Any reasons not codable into one of the above categories.

Each of the two sets of coding categories was utilized hierarchically. That is, the S's reported reason was assigned, in each case, to the

highest category (i.e., the lowest number) which was considered to be relevant. Before the reasons were coded, they were transcribed from Form B onto individual index cards. In order to minimize clues concerning the S's sex and experimental group the transcriber altered all proper names and personal pronouns referring to the S's partner to the words "my partner." The coding was then done by two independent judges who agreed in their categorization of 91 percent of the "yes" responses and of 96 percent of the "no" responses. Disagreements were resolved by means of discussion between the two judges. Table 31 presents the distribution of reasons for the "yes" responders as a function of sex and experimental condition.

Table 31 serves to confirm our fears that, in fact, most Ss who chose to continue canceling numbers did not do so because of a desire to help their partners. By far the most common category of reasons given by the "yes" responders was that of "relative information"--that is, the desire to have less information than one's partner during the expected discussion. And, as suggested by the interpretation put forth earlier concerning the sex difference in helping rates, this category of reason was used most of all by women in the Together groups. Although the number of "yes" responders is too small to permit firm conclusions to be drawn, the reported frequencies are at least congruent with the notion that women who are paired with their own boyfriends are more likely than any other group of Ss to be motivated to cast themselves in a subordinate role in the subsequent discussion. As one woman in the Weak Together group put it, "I felt it would be better if my partner knew more about the case so he could present more of his ideas to think about when discussing it." It is also of interest to observe that of

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TABLE 31

REASONS GIVEN BY "YES" RESPONDERS

	HELPING	RELATIVE INFORMATION	TASK PREFERENCE	OTHER	TOTAL ^a
<u>Strong Together</u>					
Women	3	4	1	0	8
Men	3	1	0	0	4
<u>Weak Together</u>					
Women	1	5	0	0	6
Men	2	4	0	0	6
<u>Strong Apart</u>					
Women	1	0	0	0	1
Men	0	4	1	0	5
<u>Weak Apart</u>					
Women	0	2	1	0	3
Men	0	1	1	1	3
<u>Combined Together</u>					
Women	4	9	1	0	14
Men	5	5	0	0	10
<u>Combined Apart</u>					
Women	1	2	1	0	4
Men	0	5	2	1	8

^a These totals do not correspond precisely to those presented in Table 30. A total of three Ss (one woman and one man in the Weak Together group and one man in the Weak Apart group) did not push the button, but later reported (both on Form B and during the post-experimental interview) that they had elected to continue canceling numbers. They are included as "non-helpers" in Table 30, but as "yes" responders in this table. In addition one man in the Strong Apart group (a "helper") neglected to fill out the page of Form B which called for the reason for his choice.

the ten Ss who did state reasons coded as "helping," six were in the Strong Together group, three were in the Weak Together group, and only one was in an Apart group. Although the frequencies are once again too small to justify anything other than wishful thinking, this pattern at least hints at the possibility that if a more adequately calibrated measure of helping were to be devised, the predicted difference between Strong Together and Weak Together Ss would indeed emerge.

Finally, Table 32 presents the distribution of reasons given by the "no" responders, once again as a function of sex and experimental condition. It will be noted, first of all, that although the "suspicion" category was placed on top of the coding hierarchy, very few Ss explained their failure to help in terms of the suspicion that their choice would not in fact be actualized. Evidence did emerge during the post-experimental interviews indicating that some additional Ss had entertained suspicions along these lines but had been reluctant to express them. Nevertheless, the data suggest that most Ss accepted the situation at face value. By far the most common category of reasons given for failing to help was that of "task preference." The Ss simply noted that they were bored with the task, and/or that they were interested in the case report, and had, therefore, chosen to abandon the former activity in favor of returning to the latter. (The pleasure principle wins again!) It is also of interest to note, however, that 16 of the 59 male "no" responders, but only six of the 61 female "no" responders gave reasons coded as "relative information." The chi-square value for this difference in proportions, contrasting use of the "relative information" category with all others combined is 4.87 ($p < .05$.) Complementing the tendency of some women in the Together conditions to want to have less information than their partners in the discussion, there was a tendency for men in all groups to want to have

TABLE 32

REASONS GIVEN BY "NO" RESPONDERS

	SUSPICION	RATIONAL- IZATION	RELATIVE INFORM.	CONSID. TASK PREF.	TASK PREF.	OTHER	TOTAL
<u>Strong Together</u>							
Women	0	3	0	0	8	0	11
Men	1	0	5	0	8	1	15
<u>Weak Together</u>							
Women	1	1	2	2	7	0	13
Men	0	1	4	0	6	2	13
<u>Strong Apart</u>							
Women	1	0	2	2	15	0	20
Men	0	0	4	1	9	0	14
<u>Weak Apart</u>							
Women	0	0	2	0	15	0	17
Men	1	0	3	0	13	0	17
All women	2	4	6	4	45	0	61
All men	2	1	16	1	36	3	59

Note.--See footnote accompanying Table 31.

more information than their partners in the discussion. One male S in the Weak Together group permitted his version of the doctrine of male superiority to slip out by explaining his decision to return to the case report in the following terms: "My partner has just about all the information she needs in the first couple of paragraphs. Most else won't affect her decision, but will mine."

In summary, it must be concluded that the portion of the laboratory experiment intended to compare the helping behavior of Strong Love and Weak Love Ss fell short of the mark. As a result of both the low overall

helping rate and the confounding of "helping" with the relative amount of information which would be available to the partners during the anticipated discussion, no conclusions can fairly be drawn about the ability of love-scale scores to predict such behavior. The fact that the majority of Ss who said they had decided to continue canceling numbers in order to relieve the distress of their partners were, in fact, in the Strong Together condition at least keeps alive the hope that a more adequately devised situation would yield the predicted results.

Summary: The Love Scale as a Behavioral Predictor

The official scorecard on the outcome of the laboratory experiment reads one hit, one strike-out, and one foul ball. To provide the replays in reverse order, the measure of "helping" was almost certainly inadequate, and, as a result, assessment of the ability of the love scale to predict helping behavior will require further research. The attempt to predict between-group differences in time perception as a function of love-scale scores turned out to be futile. Any further research along these lines should probably employ a paradigm in which an individual can be employed as his own control (e.g., by comparing a person's time estimates when he is with his girlfriend with the same person's time estimates when he is with someone else). On the positive side of the ledger, the prediction that Strong Together couples would make more eye contact (during the Waiting Period) than Weak Together couples was confirmed. The fact that this difference was not significant with respect to the measure of individual looking and was most significant with respect to the measure of mutual focus (i.e., the proportion of total looking time occupied by mutual looking) suggested that eye contact may be viewed most profitably as a manifestation of the exclusive and absorptive aspect

of romantic love. People who love each other a great deal are seen as being highly absorbed in one another, and as being less affected than others by external stimuli or social pressure. It would seem reasonable, therefore, for a person who is strongly in love to be able to sing to his loved one, either in the laboratory or elsewhere:

Here are you, so am I,
Maybe millions of people go by,
But they all disappear from view
For I only have eyes for you.

No S in the present experiment resorted to song, however.

Several unanticipated results were also obtained which seemed to fall under the rubric of sex-role behavior. It was found that female Ss looked at male Ss more than male Ss looked at female Ss and that, particularly during the Discussion Period, this "looking differential" was greater among unacquainted pairs than among dating couples. It was also reported that men talked more than women in the task-related Discussion Period. In the unstructured Waiting Period, women talked more when they were with their boyfriends and men talked more when the pairs were unacquainted. Some, but not all, of these results seemed to be in accord with the proposition that sex-role specialization is more pronounced among unacquainted couples than among acquainted couples. On the other hand, it was found that women in the Together groups were more likely than any other subgroup of Ss to base the decision to "help" on a desire to have less information than one's partner in the subsequent discussion. With respect to this opportunity to cast oneself and one's partner into interactive roles, then, sex-role considerations seemed to be more salient for women who were together with their own boyfriends than for women who were paired with strangers.

As Angrist (1969) concluded in her recent review of research in this area, the construct of "sex role" has rarely been defined by the people who study its manifestations. Moreover, those definitions which have been proposed are not altogether congruent with one another. Different theoretical emphases are reflected by the equation of "sex role" with a social position, a set of behaviors, or an interpersonal relationship. The present results do not point the way to a grand integration of these diverse approaches. It may be noted, however, that Angrist's review includes virtually no references to experimental research on sex roles. The present results suggest to me that such investigations might prove to be helpful in clarifying the theoretical muddle.

CHAPTER VI

SIX MONTHS LATER

Do young men and women who love each other a great deal stay together? Does their love, as the "romantic ideal" dictates, inevitably lead them to marriage? Do dating relationships in which there is relatively little love, on the other hand, tend to be short-lived? Everyday observation tells us that such a pattern is not "inevitable." There are undoubtedly many instances, even in our "romantic" society, in which people marry "for money" or "for status," rather than "for love." In addition, as discussed in Chapter 4, it may be relatively common for partners who love each other a great deal to break up because of external obstacles such as those which accompany religious differences. Nevertheless, the "love pattern" (cf. Goode, 1959) of mate-selection is so integral a part of modern Western culture that it would be nonsensical to propose that, on the whole, love does not lead to marriage. Such a proposition would also be unsupportable on psychological grounds. Love, as we have defined it, includes affiliative and dependent needs for the loved one, a predisposition to help him, and an exclusive, absorptive orientation toward him. To terminate one's relationship with a person whom one loved, therefore, would seem to be a peculiarly self-defeating act.

In light of these considerations, it may be concluded that a particularly important reflection upon the construct validity of the love

scale is its ability to predict progress toward permanence in the dating relationship. If dating couples who are strongly in love do not make more progress toward permanence than couples who are weakly in love, then we may be forced to conclude either that love itself is highly unstable or that the love scale is highly unreliable. Either of these conclusions would diminish the scale's potential utility. In order to assess the love scale's predictive validity in this regard, a followup study was conducted about six months after the administration of the questionnaire. In this chapter, I will first describe the procedure of the study and the measure used to assess progress toward permanence in the couple's relationships. Then I will present data concerning the association of such progress with the respondents' initial love for one another.

The Followup Survey

The original questionnaire was administered at the end of October, about two months into the school year. In the middle of April, five and a half months after the questionnaire sessions and two weeks before the end of the winter term, a one-page followup questionnaire was sent to all respondents. This questionnaire, which is reproduced in Appendix C, asked for a report of the current status of the couple's relationship (ranging from "no longer dating" to married), a re-estimate of the likelihood that the two partners would marry one another, and an assessment of whether the relationship had become more or less intense since the time that the original questionnaire was completed. The last-mentioned question was accompanied by a five-point scale ranging from "much less intense" through "no change" to "much more intense." Members of couples who had broken up were also asked to indicate which partner had been

"primarily responsible" for the breakup. Respondents were requested to complete the form privately, "without checking your responses with your boyfriend or girlfriend (or anyone else)."

It would also have been of interest to include the love and liking scales on the followup questionnaire, in order to make possible an assessment of the stability and change of love and liking over time. Because of the incomparability of the two methods of administration and the desire to keep the followup form as short as possible, however, the scales were not included. The followup questionnaire was completed by 317 (162 women and 155 men) of the 364 original respondents, a return rate of 87.1 percent. Followup reports were obtained from at least one member of 179 of the 182 couples (98.4 percent of the couples).

Changing Times

The followup reports indicated that the dating relationships among our sample of couples tended to be quite enduring. As already reported in Chapter 4, of the 179 couples from whom at least one report was received, only 29 (16.2 percent) had broken up. (In at least two of these cases one of the ex-partners was now married to someone else.) Among the 23 initially engaged couples who were heard from, after six months four were married, 16 were still engaged, two were no longer engaged but still "going together," and only one had broken up. At least 13 additional couples, who had not been engaged at the time of the initial questionnaire, were now engaged.¹

¹For a couple to be considered "engaged," both partners had to return the followup questionnaire, both had to report that they were engaged, and both had to estimate the probability that they would marry each other as being 91-100%.

For the 162 women from whom followup reports were obtained, the estimate of marriage probability was 5.77 on the initial questionnaire and 5.60 on the followup.² For the 154 men who provided these estimates on both occasions, the mean estimate was 5.42 on the initial questionnaire and 5.54 on the followup. For both sexes the difference between the two means, as assessed by matched-pairs t tests, is trivial ($t=.75$ for women and $.60$ for men). This appearance of stability is, of course, created by the combination of positive and negative changes. It is difficult, moreover, to assess the import of this apparent stability because of the restricted range of the marriage probability variable. The scores of initially engaged couples must either remain constant or decrease, whereas the scores of respondents who were initially certain that they would not marry their partners must either remain constant or increase. Thus breakups affect the scores only of respondents whose initial estimates were high, and engagements and marriages affect the scores only of respondents whose initial estimates were low. These considerations, as well as more subtle ones concerning the nature of the dimension of subjective probability, argued against the use of changes in these estimates as a measure of progress toward permanence. (For a good discussion of the problems involved in the use of change scores, see Bereiter, 1963.)

Instead, the respondents' direct estimates of whether their relationships had become more or less intense were utilized as the measure of progress toward permanence. Although the meaning of "intensity" in this context was not spelled out, none of the respondents commented on its

²The scale ranges from 0 (0-10%) to 9 (91-100%). A score of 9 was assigned to members of couples who had gotten married.

potential ambiguity. It may be speculated, with at least a moderate degree of confidence, that reported change in intensity corresponds rather closely to perceived progress toward the permanence of the relationship. A similar measure was used for this purpose in the investigations of Kerckhoff and Davis (1962) and Levinger and Senn (1968). (In these studies, however, the dimension was defined by the terms "closer" and "more distant," rather than by the terms "more intense" and "less intense.")

Each of the 179 couples in which at least one member returned the followup form was categorized as "less intense," "no change," or "more intense," in accordance with the following criteria:

a. Less intense. Both partners reported that the relationship had become "less intense" (or "much less intense") or one partner reported that it had become "less intense," and the other reported "no change" or only one partner returned the questionnaire and reported that the relationship had become "less intense."

b. No change. Both partners reported "no change" or one reported that the relationship had become "more intense" and the other reported "no change" or one reported that it had become "more intense" and the other reported that it had become "less intense" or only one partner returned the questionnaire and reported "no change."

c. More intense. Both partners reported that the relationship had become "more intense" (or "much more intense") or only one partner returned the questionnaire and reported that the relationship had become "more intense."

TABLE 33

PERCENTAGE OF COUPLES WHO REPORTED ON FOLLOWUP QUESTIONNAIRE THAT
THEIR RELATIONSHIPS HAD BECOME LESS OR MORE INTENSE

Dating length ^a	N	Less intense	No change	More intense
0-3 months	39	38%	10%	51%
4-11 months	40	15	15	70
12-17 months	40	10	20	70
18+ months	60	20	27	53
All couples	179	21	19	60

^aRefers to the length of time that the couple had been dating at the time of the initial questionnaire.

Table 33 presents the percentages of couples whose relationships had become less intense or more intense (or had not changed) within each of the four categories of dating length. The bottom row of the table indicates that even though the criteria for inclusion in the "more intense" category were relatively stringent, there was a strong overall tendency for relationships to become more intense, rather than becoming less intense or remaining unchanged. The "no change" column of the table indicates, in addition, that the longer a couple had been dating, the less changeable its relationship tended to be. The relationships of "0-3 month" couples are almost as likely to become less intense as to become more intense. As reported in Chapter 4 (see Table 20), the breakup rate is highest among these short-term couples. Once a couple has successfully cleared the "three-month barrier,"³ the figures suggest that

³The label of "three-month barrier" is, of course, rather arbitrary. Changes in the intensity of the relationships of couples who had been going together for up to three months at the time of the initial questionnaire could have taken place at any time between the initial questionnaire and the collection of the followup report. Respondents were not asked to indicate when the breakup took place.

it is relatively likely to make progress toward permanence for another year or so. After about 18 months, however, progress seems to slow down to some extent. The overall chi-square value for the frequencies on which Table 33 is based, reflecting the extent to which the relative-intensity distributions for the four categories of dating length differ from one another, is 15.82 ($df = 6, p < .025$).

In Chapter 4 it was also reported that among long-term couples (those who had been dating 18 months or more at the time of the initial questionnaire), the proportion of breakups among different-religion couples was more than twice as great as that among same-religion couples. With respect to the categories of change in intensity employed here, however, the effects of religious symmetry are negligible. Among the 100 same-religion couples heard from, 19 percent of the relationships had become less intense, 18 percent had not changed in intensity, and 63 percent had become more intense. Among the 58 different-religion couples the corresponding percentages are 24 percent, 21 percent, and 55 percent.

Love and Progress Toward Permanence

Table 34 presents the love scores of members of couples whose relationships were categorized as less intense, unchanged, or more intense on the basis of the followup reports. It was predicted that love would be positively related to progress toward permanence, as reflected by the reported changes in intensity.

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TABLE 34

MEANS AND STANDARD DEVIATIONS OF LOVE SCORES OF MEMBERS OF COUPLES
WHOSE RELATIONSHIPS WERE TO BECOME LESS OR MORE INTENSE

	N	WOMEN		MEN	
		\bar{X}	SD	\bar{X}	SD
Less intense	37	84.08	19.70	85.94	16.64
No change	34	90.79	14.05	87.53	17.18
More intense	108	92.56	13.03	92.86	12.91
\underline{t} for less intense vs. no change		1.64 †		.39	
\underline{t} for no change vs. more intense		.67		1.93 *	
\underline{t} for less intense vs. more intense		2.97 **		2.60 **	

† $p < .06$, 1-tailed * $p < .05$, 1-tailed ** $p < .01$, 1-tailed

For both sexes there was a clear tendency for members of couples whose relationships were to become more intense to have higher love scores than members of couples whose relationships were to become less intense. Thus the major hypothesis of the followup study was confirmed. Additional insight into the effects of love upon progress toward permanence may be gained by considering the love scores of respondents whose relationships were to remain unchanged. Among female respondents, the major effect of love was manifest in the difference between the scores of members of couples whose relationships were to become less intense and members of couples whose relationships were to remain unchanged. Among male respondents, on the other hand, the major effect of love was manifest in the difference between the scores of members of couples whose relationships were to remain unchanged and members of couples

whose relationships were to become more intense. It may be speculated, on the basis of this pattern of differences, that the woman's love is of greatest importance in determining whether or not the relationships will weaken or terminate, and the man's love is of greatest importance in determining whether or not the couple will make positive progress toward permanence. To paraphrase a proverb which is more often used to characterize the relationship between man and God, it seems plausible that at least within the present sample of couples, man proposes and woman disposes.

It should be recognized that this paraphrase goes well beyond any legitimate limits of inference. Even though the data suggest that the man's love may be of relatively great importance in determining whether or not the relationship will be intensified, they do not necessarily imply that it is the man himself who will do the "proposing." Similarly, the suggestion that the woman's love may be relatively important in determining whether or not the relationship will weaken or terminate does not necessarily imply that it is she who will do the "disposing." Some evidence in support of the latter speculation was nevertheless obtained. In 17 of the 29 instances of reported breakups, it was the woman who was reported to be "primarily responsible," and in only eight cases the man was reported to be primarily responsible.⁴ (In three of the remaining four cases the partners agreed that the breakup was

⁴The reports of the two partners were not characteristically congruent, however. In six cases the woman reported that she had been primarily responsible for the breakup and the man reported that it had been "completely mutual." In three cases the man reported that he had been primarily responsible and the woman reported that it had been "completely mutual." In only one case did a respondent (a woman) suggest that her partner was primarily responsible for the breakup while the partner reported that it was "completely mutual." It is probably considered to be more desirable to be the one who broke up the relationship than to be the one who was broken up with, and the discrepant reports seem to reflect this differential desirability. The frequencies given in the text ignore the report of the partner who said the breakup was "completely mutual" in these discrepant cases.

"completely mutual," and in one case each of the partners claimed to have been responsible.) The 17:8 ratio of female-precipitated to male-precipitated breakups differs from the chance expectation of an equal split at the .10 level ($\chi^2 = 2.94$). No systematic connections between the sex of the responsible party and other characteristics of the couple (e.g., religious symmetry and length of dating) were found.

This tendency for women to be responsible for more of the breakups than men is clearly in accord with the suggestion that "woman disposes." It was also found, however, that the love scores of the women who broke up with their boyfriends did not tend to be lower than their boyfriends' love scores. In nine of the 17 cases the woman's love was greater than the man's, and in the remaining eight cases the man's love was greater than the woman's. (Among the couples in which the man was responsible for the breakup, his love was greater in five cases and her love was greater in three cases.) This finding is somewhat inconsistent with the reasoning that originally led to the conjecture that "woman disposes." Nevertheless, it seems to be in accord with the general notion that progress toward permanence is a more salient aspect of courtship for women than it is for men.

It is commonly believed (although I have not located the statistics to prove it) that as women move through their 20's they become less and less "marriageable," whereas this is not the case for men. It would seem reasonable, therefore, for the woman to be more likely than the man to terminate a relationship if the chances that it will lead to marriage seem to be small, as reflected by a relatively low level of love held by one or both partners. This would be true even in cases in which the woman loves her boyfriend more than he loves her. Men, on the other hand,

are often seen as being content to let their dating relationships drift along, without necessarily heading toward marriage. It may be, however, that the strength of this tendency is inversely related to the strength of the man's love for his girlfriend. If he loves her enough, he will either attempt to intensify the relationship or, perhaps more typically, he will allow the woman to intensify the relationship. The woman's level of love may be less critical with respect to the decision to intensify or not to intensify. As long as she assumes that the relationship is promising (or loving) enough to be maintained, the woman will usually be more highly motivated than the man to have it progress toward permanence, regardless of her level of love.

A Note of Caution

The results presented in this chapter clearly confirm the major hypothesis of the followup survey, that love scores should be positively related to progress toward permanence in courtship. But my subsequent suggestion that the woman's level of love is most important in determining whether or not the relationship will be de-intensified, while the man's level of love is most important in determining whether or not it will be intensified, represents a rather indirect derivation from the pattern of mean love scores presented. It is almost certain, moreover, that the connections between dating partners' attraction toward one another and the progress of their courtship are considerably more complex than I have made them out to be. An adequate account of these connections would almost certainly have to take into account the attitudes of both partners simultaneously, rather than the attitude of one or the other partner alone.

Since the followup survey was completed only shortly before the deadline for the submission of this report, more detailed analyses of the followup results have not yet been undertaken. I hope to undertake such analyses, however, in which the joint effects of the two partners' love, as well as the possible effects of other measured variables, upon progress toward permanence will be considered. Potentially relevant variables include the respondents' liking scores, their scores on the Romanticism Scale, and the ideological similarity of girlfriends and boyfriends as reflected by their scores on the F-Scale. In the latter instance it will be of interest to determine whether couples in which the partners have similar ideologies are more likely to make progress toward permanence than couples in which the partners have relatively dissimilar ideologies. The results of this analysis might help to resolve some of the contradictions generated by previous research on the role of attitudinal similarity in mate-selection (e.g., Kerckhoff & Davis, 1962; Levinger & Senn, 1968).

There is another reason that caution is necessary in the interpretation of the results of the followup survey, and it involves an ambiguity which cannot be resolved by means of more detailed data analysis. This is the possibility that the courtships of some of the couples were directly or indirectly influenced by their participation in the research. When the respondents themselves were asked to speculate about this possibility, many of them suggested that there might well have been such effects. Both the methodological and the ethical issues related to this possibility will be discussed in the next chapter.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The Nature of Love

In his paper by the above title, Harlow (1958) made the following observation:

Love is a wondrous state, deep, tender, and reassuring. Because of its intimate and personal nature it is regarded by some as an improper topic for experimental research. But, whatever our personal feelings may be, our assigned mission as psychologists is to analyze all facets of human and animal behavior into their component variables. So far as love or affection is concerned, psychologists have failed in their mission. The little we know about love does not transcend simple observation, and the little we write about it has been written better by poets and novelists. (Harlow, 1958, p. 673)

The present research, like Harlow's well-known series of studies, was concerned with the nature of love. It may help us to place the present investigation into its proper context, therefore, if we compare its approach with that taken by Harlow.

Both Harlow and I set out to remedy the lack of scientific knowledge about love. His attempt was concerned with the development of affectional responses in infant monkeys, and it led to the conclusion that "contact comfort" is a central determinant of such development. The present research, in contrast, was concerned specifically with romantic love -- that is, the sort of love which may exist among young adult opposite-sex couples. As Orlinsky (in press) has suggested, filial love and romantic love, as well as several other postulated

varieties, may well share certain fundamental characteristics. But neither Harlow nor I attempted to probe more than one variety of love at a time. In each case the particular variety of love in question was approached in its own terms.

Harlow suggests that his research was motivated by the desire to help carry out "the assigned mission of psychologists." Although I would prefer not to characterize myself as a missionary, it should be clear that the present investigation was approached from the perspective of the sociologist as well as from that of the psychologist. A primary reason for my decision to attempt to conceptualize and measure romantic love (in addition to the fact that, like Mount Everest, it was there) was that it seemed to be a uniquely valuable linking concept between the individual and the social-structural levels of analysis. Love is viewed herein as an interpersonal attitude (in Newcomb's [1960] terminology, a "variety of interpersonal attraction"), rooted in the perceptions and motives of the individual. At the same time, however, love is deeply embedded in its social context. Because love is generally considered to be a necessary prelude to marriage, patterns of romantic love are both influenced by and exert influence upon the kinship and stratification systems of Western society. The consideration, in Chapter 4, of the course of love in same-religion and different-religion couples represented an initial attempt to explore these reciprocal influences.

In his study of the affectional responses of infant monkeys, Harlow did not make use of any specifically designated measure of love which might be seen as parallel to the love scale utilized in the present research. Instead, he inferred the infant's level of love from the

amount of time that it spent clinging to the wire or cloth mother-surrogate and from the relative magnitude of fear responses (e.g., crying, crouching, and toe-sucking) in the mother's presence and in her absence. The use of these particular behavioral indicators implies that for Harlow, the nature of filial love is defined by one's response to the fulfillment of affiliative and/or dependent needs. When the infant is clinging to its mother (or mother-surrogate) it feels happy and secure -- and, it is implied, loving. When the mother is absent the infant is unhappy and frightened -- in other words, unloving. This analysis also suggests that whereas romantic love, in the present research, is viewed as an attitude, filial love, in Harlow's terms, is an emotion.

In both the present research and Harlow's, however, affiliative and dependent need is considered to be an important component of love. A person who loves his partner a great deal is one who is likely to report on the love scale that it would be extremely hard for him to get along without his partner, and that if he could never be with his partner he would feel miserable. In contrast to Harlow, I have been viewing the need itself, rather than one's response to its fulfillment, as a part of the conceptual definition of love. Nevertheless, the association of love with an affiliative and dependent need for the love object is a common element of the two approaches.

In addition to felt affiliative and dependent need, the present conception of love makes reference to the lover's exclusive, absorptive orientation toward the object of his love and to his concern for and predisposition to help that object. The exclusive component of love was suggested most directly by Slater's (1963) analysis of "dyadic with-

drawal." People who love each other a great deal are seen as focusing their interpersonal energies upon one another to an unusually large extent, in spite of society's attempts (by means of various norms and institutions) to stop them. Such an orientation may be seen as reflected to some extent in the clinging behavior of infant monkeys, but not in a sense which makes it easily distinguishable from affiliative and dependent needs. The third postulated component of romantic love, the predisposition to help the love object, does not seem to be reflected in any of the behaviors observed by Harlow. In addition to its role in romantic love, such a predisposition is probably more likely to characterize the love of mothers for their children than the love of children for their mothers.

It seems, then, that the conception of love adopted in the present research overlaps to some extent the conception of love which may be inferred from Harlow's studies. By virtue of their reference to two rather different social contexts, however, the two conceptions remain unmistakably distinct from one another.

The Road to Validation

This investigation represented an attempt to define and validate a construct. At the conclusion of the investigation, therefore, it seems appropriate to look back to see how far along the road toward construct validation it has taken us, and also to try to chart the shape of the road which still lies ahead.

Starting with the assumption that love is an interpersonal attitude, the components of this attitude were specified on the bases of face validity, as assessed by judges' categorizations of items as well as by

my own intuitions, and internal consistency, in terms of the intercorrelations of students' responses to these items. Students' responses to items related to their affiliative and dependent need for their girlfriends or boyfriends, their exclusive and absorptive orientation toward them, and their predisposition to help these objects were highly intercorrelated, suggesting that these sets of items be viewed as reflecting three components of a single variety of attraction, which was labeled "love." In addition, responses to these items were found to be somewhat independent of responses to items related to favorable evaluation, respect, and perceived similarity. The latter sets of items were seen as reflecting an attitude of "liking," as distinct from an attitude of "love."

The reasonableness of the distinction between love and liking was generally attested to by the obtained pattern of correlations among love, liking, and other measured variables in the questionnaire study, as reported in Chapter 3. It was found, for example, that love was more highly correlated than liking to respondents' estimates of the likelihood that they would marry their partners and to their feelings about whether or not they were "in love." In light of the culturally prescribed association between love and marriage (but not necessarily between "liking" and marriage), this pattern of correlations seems appropriate. Love is clearly not to be equated with perceptions of closeness to marriage, however. In this respect, a distinction was drawn between love, as measured by the love scale, and "in-loveness" (the respondent's report that he and his partner are or are not "in love"). "In-loveness" was characterized as a "quasi-demographic" variable, in that it paralleled quite closely respondents' estimates of marriage probability and their

categorizations of their relationships as "dating," "going together," or "engaged." Love, on the other hand, is seen as an attitudinal variable whose meaning is shaded, but by no means exhausted, by its association with thoughts about marriage. It also seems likely that the association between love and marriage probability is mediated by other variables. In Chapter 4, for example, data were presented which supported the prediction that this association would be greater among romantic men than among non-romantic men.

Somewhat uncertain progress along the road to validation was made in Chapter 4, when the relationships between love and the social-structural variable of religious symmetry were considered. There was, as predicted, a tendency for respondents to love their partners more if the two were of different religions than if the two were of the same religion, but this was only the case among couples who had been dating for less than 18 months. Among couples who had been dating for 18 months or more there was, if anything, a tendency for same-religion partners to be loved more than different religion partners. I had predicted, in contrast, that the excess in love for different-religion partners should be greatest among couples who had been dating for the longest periods of time. Since this prediction was specifically disconfirmed, the obtained results (as presented in Figures 2 and 3) did not perceptibly increase my confidence (nor, I would imagine, the reader's) in the predictive validity of the love scale. In light of the fact that research on romantic love is still in its infancy, however, I hope that I may be forgiven for regarding the obtained reversal (or near-reversal) of means among the long-term couples as intriguing rather than disappointing. Although they are clearly open to a large number of alterna-

tive interpretations, these results suggest to me that love may indeed play the rationalizing role attributed to it by the dissonance theory analysis presented in Chapter 4...sometimes. Thus, one of the tasks which lie ahead may be the specification of the conditions under which increases in love are likely to serve a rationalizing function. More generally, future research should ultimately attempt to explore the whole range of potential motivational antecedents of love, which may include the needs for such diverse goals as self-esteem, power, sexual satisfaction, achievement, material comforts, and spiritual growth, as well as the already mentioned needs for affiliation, dependency, and cognitive consistency. But here, to be sure, I am describing a long-range program. Some of the other directions for research to be indicated below should almost certainly be given higher priority than an exhaustive motivational inventory.

The results of the followup survey reported in Chapter 6 provided more clearly positive support for the predictive validity of the love scale. It was found that the more dating partners loved one another, the more likely they were to report six months later that their relationship had made progress toward permanence. It should be noted, however, that neither this result nor those reported in Chapter 4 refer specifically to the distinction between love and liking. Several of the analyses reported in these chapters were repeated, substituting liking for love as the focal variable. It may be useful to report at this point that, for example, the joint effects of length of dating and religious symmetry upon liking were rather slight in comparison to their joint effects upon love. On the other hand, initial liking was almost as highly related to subsequent progress toward permanence as was initial

love. In future research on romantic love it would probably be valuable, at least for a while, to include explicit comparisons between love and liking (and/or other varieties of attraction). It may also be that in some instances better predictions will be made by considering the joint effects of love and liking, rather than the effects of each in isolation.

The laboratory experiment described in Chapter 5 had a particularly important status in the overall program of construct validation because it attempted to bridge the gap between questionnaire responses and other manifestations of interpersonal attitudes which may be more representative of real-life social behavior. In the experiment, as predicted, "strong-love" couples spent more time gazing into one another's eyes while waiting for the experiment to begin than did "weak-love" couples. Mutual looking may be seen as at least somewhat relevant to all three of the postulated components of love. It was noted, however, that the difference between strong-love and weak-love couples with respect to the measure of individual looking, for both sexes, was relatively slight. The difference was most striking when the dependent measure employed was that of "mutual focus" -- that is, the proportion of total looking time (i.e., the amount of time during which at least one of the partners was looking at the other) which was occupied by mutual looking. In other words, strong-love and weak-love couples differed from one another with respect to the simultaneousness, rather than with respect to the sheer quantity, of other-directed looking behavior. It was suggested that to the extent that either the "affiliative-dependent" or the "helpful" component of love might underlie other-directed looking, there should be between-group differences in individual looking, as well as in mutual

looking. The obtained pattern of results seemed most easily interpretable, therefore, in terms of the tendency of lovers to be absorbed in one another.

The experimental predictions relating love to time perception and helping behavior were not confirmed, however. The latter failure was particularly disappointing because the prediction was dictated directly by one of the three postulated components of love. It was noted that this failure may have been due to certain inadequacies of the experimental test. A high-priority direction for future research, therefore, is to assess the relationship between love and helping behavior in additional laboratory and/or field experiments. If no empirical relationship between love scores and helping behavior is found, it will probably be advisable to exclude the predisposition to help from the conception of romantic love. Its inclusion cannot, in my view, be justified on the basis of inter-item correlations alone.

Two additional, and relatively informal, studies of the behavioral manifestations of love have already been conducted. In the first of these, conducted in collaboration with Steven Riskind and Eleanor Wasserman, all couples who participated in the laboratory experiment were invited several months later to take part in a weekend T-group session concerned with dating relationships. It was predicted that a higher proportion of strong-love than of weak-love couples would commit themselves to take part. This prediction was based on an extension of the conception of love to the notions that strong-love couples would be more interested than weak-love couples in exploring their relationships, and that they would feel more secure about subjecting their relationships to such exploration. It was also conjectured that the likelihood that a

couple would volunteer for the T-group might be influenced by whether they had participated in the laboratory experiment together or separately. No specific prediction involving the Together-Apart factor was made, however. The overall rate of volunteering was relatively low (19.0 percent), and the obtained difference in the proportion of strong-love and weak-love couples who volunteered, although in the predicted direction, was far from significant. The data suggested, however, that couples who had been in the Strong Together group in the laboratory experiment were more likely to volunteer than couples who had been in the Weak Together, Strong Apart, or Weak Apart groups. Of the Strong Together couples 38.9 percent volunteered for the T-group, as compared to 13.1 percent of the couples in the other three groups combined. A post hoc test of the difference between the Strong Together group and the other three groups combined yielded a chi-square value of 4.44 ($p < .05$). This result had not been predicted, and certainly should not be considered to be conclusive. It seems at least plausible, however, that the experience of participating together in the laboratory experiment had the effect of increasing the willingness of strong-love couples (but not of weak-love couples) to take part in further psychological activities, and/or their desire to explore their relationships.

The second study was conducted by three of my undergraduate students, Lois Feingold, Gregory Semonick, and Sally Sloman, who were interested in investigating the factors determining the amount of knowledge dating partners have about each other. They approached this problem by administering the love scale to 37 dating couples, together with a "knowledge questionnaire" which asked respondents to report such facts about their partners as mother's maiden name, father's occupation, shoe

size, and whether or not he still had his tonsils. The respondents also provided the same pieces of information about themselves, making it possible for the investigators to compute accuracy scores. The results of the study were, on the whole, ambiguous. There was some evidence, however, suggesting that love was positively related to knowledge about one's partner among "short-term" couples (those who had been dating for less than 15 months) but not among "long-term" couples (those who had been dating 15 months or more). It might be speculated on the basis of these results that love has the effect of accelerating the knowledge-gathering process. Such an effect would be in line with the fact that the love scale includes two items referring to the sharing of confidences. A perhaps more useful technique for studying the sharing of confidences, however, would be a laboratory or field experiment in which varying sorts of information are provided to individual members of couples and their subsequent confiding behavior is directly assessed.

Another potentially important behavioral manifestation of love, which has been totally ignored in the present investigation, is sexual behavior. In recent years a considerable body of research on the social context of premarital sexual behavior has been conducted (e.g., see review by Kirkendall & Libby, 1966). Most of this research has been sociologically oriented, and there have been few if any attempts to examine the association between sexual behavior and the nature of the affective relationship between partners. Instead, most of the research has focused on such "quasi-demographic" distinctions as whether or not one is "going with" or engaged to one's partner, and whether or not the partners consider themselves to be "in love." In addition, I have been

able to discover no research on premarital sexual satisfaction. All of the research on premarital sex seems to be concerned with how much of it there is, and studies of sexual satisfaction seem to be confined to married populations. In light of the colossal state of ignorance in this area, it seems to me that quantitative studies of the causal links between love and sex should be given particularly high priority. The results of such studies would almost certainly help to clarify the nature of romantic love.

Another direction to be taken along the road to validation of the construct of romantic love involves the extension of research to other groups of subjects. In particular, attempts should be made to compare the results of studies employing volunteer subjects, such as the present investigation, with the results of studies which employ probability samples of particular populations. In addition, it will eventually be of interest to compare the manifestations of love among college students with its manifestations among other educational and socioeconomic groups of young adults. In their survey of married couples in the Detroit area, Blood and Wolfe (1960) found that wives' satisfaction with their husbands' "love" for them was greater among whites, city dwellers, and higher socioeconomic groups than among Negroes, farmers, and lower socioeconomic groups. This finding led the investigators to the rather startling conclusion that "Love is an artistic creation which reaches its highest perfection in the sophisticated upper reaches of American society. It is a boon which a more leisurely, better-educated society has conferred upon its members" (Blood & Wolfe, 1960, p. 234). Blood and Wolfe were not very specific about what they considered the nature of this "artistic creation" to be. Nevertheless, the possibility that the conception of love emerging

from the present research is, in fact, relevant only in the "sophisticated upper reaches" cannot be discounted. Research into this question definitely seems called for. From a strategic point of view, however, it might be best to stick with college students for a while before moving to other subject populations.

It may be concluded that the present investigation represents a useful first step in the social-psychological study of romantic love, but that there is still a long way to go along the road to validation. In this section I pointed to several directions for future research on the nature of romantic love. Particularly high priority was assigned to additional laboratory and field experiments on the behavioral manifestations of love, and to the investigation of the links between love and sexual behavior. The love scale which was developed for use in this study promises to be a useful tool in future research if, and only if, it is not allowed to remain in its present version for too long. Certain necessary revisions, as dictated by the internal analysis of love-scale and liking-scale responses, were referred to in Chapter 3. More generally, continuing attempts should be made to increase the predictive validity of the scale, both by improving its format and by keeping its content in touch with empirical results.

Male and Female

Throughout this investigation, one "independent variable" has proved to be far more important than any other as a means of categorizing respondents and subjects. This is the variable of sex. One good way to summarize the results of the research, in fact, is to list some of the sex differences which were discovered. I will do so here, in roughly the

order in which the findings were originally presented.

Chapter 3

1. Although the mean love scores of the two sexes were virtually identical, women tended to like their boyfriends more than men liked their girlfriends. (Table 9)

2. Love and liking for one's partner were more highly inter-related among men ($r=.60$) than among women ($r=.39$). (Table 10)

3. Girlfriends' estimates of the likelihood that they would marry their partners tended to be higher than those of their boyfriends. (p. 63)

4. When the two partners did not agree as to whether they were "dating," "going together," or "engaged," it was usually the man who made use of the more intense category. (p. 55)

5. Men obtained higher scores than women on the Romanticism Scale. (Table 9)

Chapter 4

6. Women felt that it was more likely that they would marry their boyfriend if the two were of the same religion than if they were of different religions. Men made no such distinction. (Table 15)

7. Men tended to love their girlfriends more than they were loved in return among couples who had been dating for only a short period of time (0-3 months). (Figure 1)

8. Engaged men tended to love their fiancées more if the two were of the same religion than if they were of different religions. There was no such difference among engaged women. (Table 21)

Chapter 5

9. During both the Waiting Period and the Discussion Period of the laboratory experiment, women spent considerably more time looking at their partners than men did. This difference was greater if the two partners were strangers (Apart groups) than if they were dating (Together groups). (Table 24)

10. During the Waiting Period, women talked more than their partners in the Together groups and men talked more than their partners in the Apart groups. During the Discussion Period, men talked more than women in all groups. (Table 25)

11. A larger proportion of women in the Together groups than in the Apart groups "helped" their partners. Among men there was no such difference. (Table 30)

12. Men were more likely than women to cite the desire to have more information than their partners in the anticipated discussion as the reason for their failure to "help." (Table 32)

Chapter 6

13. In 17 of the 25 cases in which one partner was "primarily responsible" for a breakup reported on the followup questionnaire, it was the woman who was the responsible party. (p. 185)

14. The primary effect of women's love upon the couples' subsequent progress toward permanence was manifest in the comparison between couples whose relationships became less intense and those whose relationships remained unchanged. The primary effect of men's love was manifest in the comparison between couples whose relationships remained unchanged and those whose relationships became more intense. (Table 34)

It is extremely difficult to account for all of these obtained sex differences in terms of a small number of generalizations about the contrasting roles of the two sexes in courtship. Nevertheless, many of the results seem to be in accord with one or both of the following propositions:

Proposition 1. Males tend to specialize in the task-related aspects of interaction, and females tend to specialize in the social-emotional aspects of interaction.

Proposition 2. The male orientation in courtship tends to be "romantic," and the female orientation tends to be "adaptive" (or marriage-oriented).

The first of these propositions, which is in line with the results of such researchers as Strodbeck and Mann (1956), may help to provide an explanation for such experimental results as the excess in women's looking and, during the Discussion Period, the excess in men's talking. The additional postulate that, at least from the woman's point of view, task and social-emotional specialization is more pronounced among dating couples than among unacquainted opposite-sex pairs would help to account for the findings with respect to "helping" behavior. Women who were paired with their own boyfriends may have been more likely to "help" their partners than women who were paired with strangers because of their desire to have less information than their boyfriends in the anticipated discussion. The data on visual behavior, on the other hand, suggest that in some respects the salience of sex-role expectations may be greater among unacquainted opposite-sex pairs than among dating couples. As suggested in Chapter 5, further experimental research might

be helpful in resolving this contradiction. Finally, the tendency for women to like their boyfriends more than men liked their girlfriends may be seen as congruent with Proposition 1, inasmuch as the liking scale makes reference to the respondents' perception of such "task-related" characteristics of their partners as intelligence and good judgment.

The proposition that the male orientation in courtship tends to be "romantic" and the female orientation tends to be "adaptive" has been set forth by such researchers as Kephart (1967) and Knox and Sporkowski (1968). In addition to the replication of the finding obtained in earlier research that men obtain higher scores on scales of romanticism, the findings that women consider it relatively unlikely that they will marry a partner of a different religion from their own, and that men love their girlfriends more than they are loved in return among short-term couples seem to be in accord with this proposition. The greater marriage-consciousness of women may also be seen as reflected in their tendency to make higher estimates of marriage probability than men, and their apparently greater willingness than men to precipitate breakups. In spite of this postulated sex difference in orientation, it should be observed that love and marriage probability were highly related among both sexes ($r=.59$ for both women and men). It may be speculated that the causal link underlying this relationship is somewhat different for the two sexes. It may be that for the male in Western society it is love which leads to the expectation of marriage, whereas for the female it is the prospect of marriage which engenders love. None of the results of the present investigation are directly relevant to this conjecture,

however. It is, in my view, a potentially useful hypothesis for future research.

Neither of the two propositions stated above seems to account for the strikingly higher correlation between love and liking obtained among men than among women. The suggestion made in Chapter 3 that women may distinguish more sharply than men among different components of their attitudes toward their dating partners may be another useful research hypothesis.

Finally, I would like to note that in spite of the abundance of obtained sex differences -- and, to some extent, because of them -- I think that the decision to make use of a single version of the love scale for both sexes was a good one. This is particularly true in light of the finding that the mean scores of women and men on the love scale, as well as on its component items, were virtually identical. The adoption of a common conception of love for the two sexes seems to provide a more secure base for the evaluation of sex differences than would be possible if the nature of love, too, were conceived of as depending upon one's sex. Although the suggestion that the nature of romantic love transcends all differences related to one's sex may be somewhat presumptuous, I think that it may be a useful presumption.

The Effects of Participation in the Research Upon Its Subjects

Dating couples were recruited to take part in this investigation by means of advertisements which invited them to "gain insight into your relationship by participating in a unique social-psychological study." In light of the fact that whatever contribution this research may make to the social-psychological literature is in large measure due to the

cooperation of these subjects, it seems important to consider whether or not they actually did gain insight into their relationships as a result of participation. Social psychologists have typically paid little or no attention to the effects of their research procedures on their subjects once they have left the testing room or laboratory. Particularly in cases in which the procedures might have harmful effects upon subjects, however, such attention would seem to be necessary on ethical or humanitarian grounds. It is at least conceivable that the experience of completing the questionnaire in the present investigation was highly stressful to some respondents. The experimental sessions, in which the subjects were deceived about certain aspects of the experiment's purpose and methods, may also have had detrimental effects upon some subjects. The effects of participation in the research upon its subjects must also be taken into consideration for methodological reasons. Chapter 6 of this report was devoted to the results of a followup survey conducted six months after the questionnaire session. If these results, centering on the association between respondents' initial love scores and the subsequent course of their relationships, were affected by the research process itself, it would seem to be important that we know about it.

In an effort to assess the effects of participation, the respondents were invited, at the end of the followup questionnaire, to indicate "whether you think your participation had any effect, either favorable or unfavorable, upon your relationship." The majority of respondents did not make any comments in response to this invitation, and most others indicated that they did not think participation had any effect. A large

number of respondents felt that their participation did have an effect on their relationships, however. To the extent that they were able to gauge such influence accurately, it usually took the form of accelerating the movement of the relationship in the direction which it would have taken anyway, by bringing into the open issues or information which had previously been ignored or avoided. It is, of course, not certain that the respondents were, in fact, able to gauge these influences accurately, and it is at least possible that in some cases the effect of participation was to alter the ultimate course of the relationship. Unfortunately, there is no good way of assessing this possibility. It nevertheless seems likely that the association between love and progress toward permanence reported in Chapter 6 was strengthened rather than weakened as a result of participation. It seems likely, in other words, that in cases in which the partners loved each other a great deal, the information which was brought to the surface had the effect of increasing their involvement with one another, and that in cases in which the partners loved each other to a relatively slight extent, this information had the effect of decreasing their involvement.

It is even more difficult to assess the ethical implications of such influence. On the basis of one presumably relevant criterion, the respondents' own evaluations of the effects of participation, the influence seems to have been beneficial in almost all cases. Even when the effect of participation was to precipitate a breakup, the respondents usually expressed the opinion that the breakup was "a good thing." Perhaps a more important question than whether the effects of participation were beneficial or detrimental to the respondents is whether

they knew what they were in for when they decided to take part. My best inference, after a careful examination of the respondents' comments, is that they did. In only one or two cases did a respondent indicate that the nature of the research had been other than what he had expected. For example:

272F¹ Our participation had no effects on the relationship. I wanted to talk about it afterward but he refused to tell me anything he'd said or to listen to anything I had thought or felt about it. Not that I really had all that much to say. I was first interested in the questionnaire in the hope that it would give me some greater insight into our relationship, especially where my own, often ambiguous, feelings were concerned. This did not occur. The questions seemed very matter of fact, external, etc. The objectives of the author of the test being different from my own as a taker of the test (or questionnaire), this is not too surprising.

It seems that this respondent was expecting counseling, and did not receive any. The reverse of this situation would also be possible. Few respondents expressed such disappointment, however.

Since most of this report has been devoted to indirect inferences from respondents' checks and circles, I would like to conclude it with some of their own words. The selected but unedited comments which follow may help the reader to form his own conclusions concerning the methodological and ethical issues discussed above. Most of all, however, I hope that these comments will help to persuade the reader that, perhaps contrary to appearances, this research was not only about love. It was also about people.

103F Mr. Rubin, When we got out of your experiment, we started comparing answers, or those which we could remember, We found out what we felt we knew before, but what you reinforced...that we knew each other. Good luck, #103

¹Numbers are the respondents' identification numbers. The "M" or "F" following each number identifies the respondent as male or female.

104M Study had no effect on relationship (I refused to discuss most of the answers). Found it useful -- according to many of my answers, there was little objective reason for liking my girlfriend -- as a result, I had to analyze more closely the nature of the relationship.

105F The only comment I have is that your study raised a lot of questions which Tom and I then discussed and we probably would not have talked about these otherwise. It also raised the question of whether we would marry and we are now talking about getting married at the end of next summer.

111M You sent this at a fucking inopportune time. We broke it off yesterday, after 3 years.

123F Effect? Only that we are slightly more aware of how much we look at each other.

135F Your questionnaire enabled my boyfriend and I to analyze our feelings about marriage. I have a very negative attitude toward marriage as a suburban, middle-class, split-level, station wagon, 2-3 kid institution and cannot envision myself in such a set-up. So I do not plan to marry unless I can work out a suitable arrangement. The subject of marriage had never come between us before and it was definitely worth discussing, since we gave rather disparate views to that question on the original survey. I would say this understanding has made me a little more relaxed -- not much, though, I really didn't feel threatened, and I think we understand each other a little better now. Progress.

137M When we filled in the forms, she got mad at me when I told her I only loved her some and that we only might get married. Poor girl.

152M The test affected our relationship not at all. Although I answered the questions seriously, taking the test was done more for laughs (and the buck) than anything else.

157F The study made me realize that I love and respect my roommate more than my boyfriend. Confession!

158F Very favorable -- it is difficult to discuss relationships, this gave us specific grounds for discussion, made each of us realize the depth of our commitment to each other.

159F My ex-boyfriend took the results of the test in a completely absurd way, as he often took things, so I walked out and never came back. He decided that your test proved that I was too independent and never willing to leave things in his hands. I couldn't understand how he figured that out just from

(Continued)

talking to each other about the study, but since things were not going well and he obviously had certain convictions in such absurd deductions, I split. Your study, however, was not the initial cause of the breakup, though! -- just a little pusher...

173M Possibly this test had unfavorable effects on our relationship. We both just kept on wondering what each other had put as answers for certain questions. At that time, however, we were not too serious and the unfavorable effect was less intense. If we were to take another one now, things could really explode because of our curiosity as to what each other had put as answers. Certain questions seemed a little ambiguous to me such as "I love ____." God knows I love her; but love has to mature just as any other aspect of our personalities. There were other questions that I didn't approve of but this one in particular left me wondering about how I should answer. Good luck in your analysis of this mess.

179M Nancy and I enjoyed participating in all phases of your experiment, even to the point that it has become part of our everyday conversation. I cannot help but feel that participating brought us closer together in that we participated TOGETHER. Also many of the questions on the numerous questionnaires caused both of us (I believe) to think more about ourselves and our feelings and attitudes toward each other. The experience was at least beneficial in that it was a unique opportunity to do something with each other but, more probably, will be an experience of lasting significance and, well, amusement in that it forced us to, for one of the first times, express our thoughts concerning each other and allowed us, then, to share these thoughts and to make comparisons between each other. I thank you so much for the opportunity to know myself and my girlfriend in a way which might not have been possible, otherwise. Sincerely, _____

201F During the experiment my boyfriend became rather upset because he was afraid the experiment would question us about things which would later influence our relationship in a negative way. The results might come out in a "Dear Abby" and "you ought to do..." sort of way. Once we had discussed the experiment he was reassured, enough so to complete your last phase of the experiment. After this it had no unfavorable effects and possibly reassured us about our relationship in terms of some of the things you were testing, and your results (which I learned about in the Soc/Psych talk you gave and relayed to him)

214F No effect. Thought the questionnaire was dull. Would be interested, tho, in the results of your study.

222M Your study had no effect. The breakup could probably be attributed to differing attitudes about sex.

224M The final phase caused some momentary trouble (about 15 minutes) because it seemed to point up something we already knew: that my girlfriend acts a bit more selfishly because she sees me as being more intelligent and talented, and assumes that I can therefore do with less help.

225F Since he is now married, I think the study had no favorable effect on our relationship. Perhaps it crystallized both our thoughts about the merits of our relationship.

235F The study may have had something to do with our breaking up by bringing some things home to both of us that we were trying to ignore. However it was only one factor of many that helped me make my decision. It was an interesting experience though. But I think it hurt him and that's not what I wanted to do.

237F Although I'm sure we would have broken up without this survey, it did pinpoint a lot of our problems.

237M I think that the study was in part responsible for our breakup. Although it was not directly responsible for it, the study came at a critical period in our relationship, and the stress that it imposed was such that it swung the balance toward a breakup. This is not necessarily a damning thing, for the breakup was a good thing for both of us.

243M Though my girlfriend and I have always been close and intimate and honest in our opinions of each other and ideas for the future, the questionnaire did initiate discussion of our relationship and its future. Unfortunately, neither the questionnaire nor our discussions helped to solve the basic problem of our relationship, a difference in religious upbringing. Therefore, while we are now the closest to each other that we have ever been, that problem necessitates my opinion that there is a less than 50% chance of our marriage to each other.

248F It had some effect in that I realized that he had a very "idealistic" view of couples & marriage -- there should be no fighting -- & if there are any arguments, this is a sign of weakness in the relationship (I tend to think arguments -- if they are conducted partially as discussions, are beneficial to couples because they cure differences that I feel are bound to exist between any two people)

255M I would like to know exactly what the hell you're studying or trying to find out. Your questions seem very general and not leading to a specific problem or area of study. Are you merely making some type of correlational study, or is there some type of experimental control?

266M The program has caused the girl to think too much about marriage. This is not healthy, for me.

271F Probably the test wasn't too helpful in our relationship as #271M refused to talk about how he responded while I was ready to talk about it fully. Also for the first time (?) -- talking about your idiotic cases -- we talked about something without joking -- semi-intelligently. This conversation made me feel much more intelligent than #271M and made me feel dominant. After that talk I began to find #271M BORING. Thank you, #271F

271M If participating in your study had any effect at all, it was favorable, because we both felt that it was sort of fun.

288F At the time of the first questionnaire my boyfriend and I were surprised to find out from each other the discrepancy on the probability that we would marry. He checked 91% or so & I checked 11% or so. It made for quite a few interesting discussions.

289F It was good to have to sit down and analyze our relationship -- it turned out good for us. This winter term we have continued this by taking marriage (Health Development 345) -- it's a great course.

203F We are living together in Berkeley, California. The experiment really made me think about the strength and motivation behind the relationship. Love & peace from sunny California.

APPENDIX A
THE QUESTIONNAIRE

Note on Contents

PART I. Background information.

PART II. Love and liking scales. The scale to which each item belongs is denoted by the word "LOVE" or "LIKING" in parentheses. Items 27 and 28 do not belong to either scale. The response continuum was identical for all items, and it is presented here only after the first item.

PART III. Marlowe-Crowne Social Desirability Scale. The letter "T" or "F" in parentheses denotes whether a response of "TRUE" or "FALSE" was scored in the positive (i.e., "socially desirable") direction.

PART IV. Information about same-sex friend selected.

PART V. Love and liking scales, to be completed with respect to same-sex friend. Since the items are identical to those in Part II, only the instructions and first item are presented here.

PART VI. F-Scale. The letter "A" or "D" in parentheses denotes whether an agreeing or a disagreeing response was scored in the positive (i.e., "authoritarian") direction.

PART VII. Perceived love and liking scales. The items are identical to those in Part II and, once again, only the instructions and first item are presented here.

PART VIII. Romanticism Scale. The letter "A" or "D" in parentheses denotes whether an agreeing or disagreeing response was scored in the positive (i.e., "romantic") direction.

PART IX. Information about the dating relationship.

PART X. Additional background information

PART II

The following statements refer to your feelings and opinions about the boyfriend or girlfriend with whom you are taking part in this study. For each statement, place a check anyplace on the line, at the point which best expresses the degree to which it corresponds to your own feeling or opinion. In each case, the blank space in the statement refers to your boyfriend or girlfriend.

1. When I am with _____, we are almost always in the same mood.
(LIKING)
- | | | |
|---|--|--------------------------------------|
| ----- | ----- | ----- |
| Not at all true;
disagree completely | Moderately true;
agree to some extent | Definitely true;
agree completely |
2. If _____ were feeling badly, my first duty would be to cheer him (her) up. (LOVE)
 3. I feel that I can confide in _____ about virtually everything.
(LOVE)
 4. I think that _____ is unusually well-adjusted. (LIKING)
 5. I find it easy to ignore _____'s faults. (LOVE)
 6. I would highly recommend _____ for a responsible job. (LIKING)
 7. In my opinion, _____ is an exceptionally mature person. (LIKING)
 8. I have great confidence in _____'s good judgment. (LIKING)
 9. I would do almost anything for _____. (LOVE)
 10. I feel very possessive toward _____. (LOVE)
 11. Most people would react very favorably to _____ after a brief acquaintance.
 12. I think that _____ and I are quite similar to each other. (LIKING)
 13. If I could never be with _____, I would feel miserable. (LOVE)
 14. I would vote for _____ in a class or group election. (LIKING)
 15. If I were lonely, my first thought would be to seek _____ out.
(LOVE)
 16. One of my primary concerns is _____'s welfare. (LOVE)
 17. I think that _____ is one of those people who quickly wins respect.
(LIKING)

(CONTINUED ON NEXT PAGE)

18. I feel that _____ is an extremely intelligent person. (LIKING)
19. I would forgive _____ for practically anything. (LOVE)
20. I feel responsible for _____'s well-being. (LOVE)
21. _____ is one of the most likable people I know. (LIKING)
22. When I am with _____, I spend a good deal of time just looking at him (her). (LOVE)
23. _____ is the sort of person whom I myself would like to be. (LIKING)
24. I would greatly enjoy being confided in by _____. (LOVE)
25. It seems to me that it is very easy for _____ to gain admiration. (LIKING)
26. It would be hard for me to get along without _____. (LOVE)
27. I like _____.
28. I love _____.

GO ON TO NEXT PART

PART III

The following statements refer to ways in which people feel and act in a variety of situations. Please indicate your reaction to each statement by putting a circle around either the TRUE or FALSE alternative to the right of the statement.

	<u>Circle One</u>	
1. I never hesitate to go out of my way to help someone in trouble. (T)	TRUE	FALSE
2. It is sometimes hard for me to go on with my work if I am not encouraged a bit. (F)	TRUE	FALSE
3. I have never really hated anybody. (T)	TRUE	FALSE
4. On occasion I have had some doubts about my ability to succeed in life. (F)	TRUE	FALSE
5. I sometimes feel resentful if I don't get my own way. (F)	TRUE	FALSE
6. If I could get into a movie without paying and be sure I was not seen, I would probably do it. (F)	TRUE	FALSE
7. I have occasionally given up doing something because I thought too little of my own ability. (F)	TRUE	FALSE
8. At times I have felt like disobeying someone in authority even though I know they are right. (F)	TRUE	FALSE
9. No matter who I am talking to, I am always a good listener. (T)	TRUE	FALSE
10. I can remember a few occasions when I pretended to be ill to get out of doing something. (F)	TRUE	FALSE
11. I have sometimes taken unfair advantage of people. (F)	TRUE	FALSE
12. I am always willing to admit it when I make a mistake. (T)	TRUE	FALSE
13. I am always courteous, even to people who are disagreeable. (T)	TRUE	FALSE
14. At times I have really insisted on having things my own way. (F)	TRUE	FALSE
15. When I don't know something I don't mind admitting it openly. (T)	TRUE	FALSE
16. I would never think of letting someone else be punished for something I had done wrong. (T)	TRUE	FALSE

(CONTINUED ON NEXT PAGE)

Circle One

- | | | |
|---|------|-------|
| 17. I never resent being asked to return a favor. (T) | TRUE | FALSE |
| 18. I have almost never felt the urge to tell someone off. (T) | TRUE | FALSE |
| 19. I am sometimes irritated by people who ask favors of me. (F) | TRUE | FALSE |
| 20. I have never felt that I was punished without a good reason for it. (T) | TRUE | FALSE |
| 21. I sometimes think that when people have a misfortune, they only got what they deserved. (F) | TRUE | FALSE |
| 22. I have never deliberately said something just to hurt someone's feelings. (T) | TRUE | FALSE |

GO ON TO PART IV

PART IV

Please think of a close friend on campus of the same sex as yourself. Preferably, he or she should be a student of about your own age. For example, your roommate might be an appropriate choice.

To make sure that you have a specific friend in mind, place his or her initials in the box:

In the following questions, the blank refers to the friend whom you have specified.

1. How old is _____? _____
2. What is _____'s student status?
 _____ Freshman _____ Sophomore _____ Junior _____ Senior
 _____ Graduate or professional _____ Special or other
3. Is _____ your roommate?
 _____ Yes _____ No
4. Which of the following best describes your relationship with _____?
 _____ Close friend
 _____ Casual friend
 _____ Acquaintance
5. How long have you known _____?
6. About how often do you see _____?
 _____ Every day _____ Three or more times a week _____ Once or twice a week _____ Less than once a week
 _____ Less than once a month

GO ON TO PART V

PART V

The following statements refer to your feelings and opinions about the same-sex friend whom you specified on the preceding page. For each statement, place a check anyplace on the line, at the point which best expresses the degree to which it corresponds to your own feeling or opinion. In each case, the blank space in the statement refers to the friend you have specified.

1. When I am with _____, we are almost always in the same mood.

Not at all true; disagree completely	Moderately true; agree to some extent	Definitely true; agree completely
---	--	--------------------------------------

(Subsequent items are identical to those in Part II)

PART VI

Please indicate the extent to which you agree or disagree with each of the following statements by writing in the number which best expresses your reaction, according to the following key:

1	=	STRONGLY DISAGREE
2	=	MODERATELY DISAGREE
3	=	SLIGHTLY DISAGREE
4	=	SLIGHTLY AGREE
5	=	MODERATELY AGREE
6	=	STRONGLY AGREE

1. Many modern paintings have both beauty and purpose. (D) _____
2. What our youth need most is strict discipline, rugged determination, and the will to work and fight for family and country. (A) _____
3. The minds of today's youth are being hopelessly corrupted by the wrong kind of literature. (A) _____
4. Most censorship of books and movies is a violation of free speech and should be abolished. (D) _____
5. Science declines when it confines itself to the solution of immediate practical problems. (D) _____
6. One of the best assurances for peace is for us to have the biggest bomb and not be afraid to use it. (A) _____

(CONTINUED ON NEXT PAGE)

7. Sex offenders should be treated with expert care and understanding rather than punishment. (D) _____
8. One of the most important things for children to learn is when to question authority. (D) _____
9. Human nature doesn't make war inevitable, for man will some day establish a peaceful world. (D) _____
10. What a youth needs most is the flexibility to work and fight for what he considers right personally even though it might not be best for his family and country. (D) _____
11. It is only natural and right for each person to think that his family is better than any other. (A) _____
12. Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped or worse. (A) _____
13. Drunks and degenerates who end up in the gutter on skid row deserve their fate because of their lack of moral fiber. (A) _____
14. There may be a few exceptions, but, in general, members of a racial group tend to be pretty much alike. (A) _____
15. Poverty can be eliminated. (D) _____
16. The poor will always be with us. (A) _____
17. It usually helps the child in later years if he is forced to conform to his parents' ideas. (A) _____
18. A sexual pervert is an insult to humanity and should be punished severely. (A) _____
19. Strict discipline of children often interferes with the development of self-direction and personal responsibility. (D) _____
20. Almost everyone has at some time hated his parents. (D) _____
21. The worst danger to real Americanism during the last fifty years has come from foreign ideas and agitators. (A) _____
22. A child ought to be whipped at once for any sassy remark. (A) _____
23. It would probably be best to discourage feeble-minded people from having children. (D) _____

(CONTINUED ON NEXT PAGE)

24. Most homosexuals are hardly better than criminals and ought to be severely punished. (A) _____
25. Army life is a good influence on most young men. (A) _____
26. It is the duty of a citizen to criticize or censure his country whenever he considers it to be wrong. (D) _____
27. Without the friendly cooperation of many other nations, the United States probably could not survive for very long. (D) _____
28. As young people grow up they ought to try to carry out some of their rebellious ideas and not be content to get over them and settle down. (D) _____

GO ON TO PART VII

PART VII

The following statements are the same as the ones which you responded to earlier, with reference to your feelings and opinions about the boyfriend or girlfriend with whom you are taking part in this study. This time, you are to respond to the statements the way you think your boyfriend or girlfriend feels about you. For each statement, then, place a check anyplace on the line, at the point which best expresses the degree to which it corresponds to your estimate of your boyfriend's or girlfriend's feeling or opinion about you. This time, of course, the blank spaces refer to you.

1. When I am with _____, we are almost always in the same mood.

Not at all true; disagree completely	Moderately true; agree to some extent	Definitely true; agree completely
---	--	--------------------------------------

(Subsequent items are identical to those in Part II.)

PART VIII

The following statements represent feelings and opinions about love and marriage. As before, please indicate the extent to which you agree or disagree with each statement by writing in the number which best expresses your reaction, according to the following key:

1	=	STRONGLY DISAGREE
2	=	MODERATELY DISAGREE
3	=	SLIGHTLY DISAGREE
4	=	SLIGHTLY AGREE
5	=	MODERATELY AGREE
6	=	STRONGLY AGREE

1. Lovers ought to expect a certain amount of disillusionment after marriage. (D) _____
2. True love should be suppressed in cases where its existence conflicts with prevailing standards of morality. (D) _____
3. To be truly in love is to be in love forever. (A) _____
4. As long as they at least love each other, two people should have no trouble getting along together in marriage. (A) _____

(CONTINUED ON NEXT PAGE)

5. A person should marry whomever he loves regardless of social position. (A) _____
6. Lovers should freely confess everything of personal significance to each other. (A) _____
7. Economic security should be carefully considered before selecting a marriage partner. (D) _____
8. Most of us could sincerely love any one of several people equally well. (D) _____
9. A lover without jealousy is hardly to be desired. (A) _____
10. One should not marry against the serious advice of one's parents. (D) _____

GO ON TO PART IX

PART X

The following questions ask for some background information about yourself.

1. What is your major (or probable major) field of study?

2. What is your approximate cumulative grade-point average (or, if you are a college graduate, what was your undergraduate average)?

3. What is your father's occupation (or, if he is retired or deceased, what was it)? Please give a full answer, such as "high school chemistry teacher," "welder in an aircraft factory," "president of a small automobile agency," "manager of a large department store."

4. What is your religious background?
 Protestant (Denomination: _____)
 Catholic
 Jewish
 Other (Specify: _____)
5. List all of your brothers and sisters, starting with the oldest, and including yourself among them. On each blank that you use, please indicate both the sex of that sibling ("M" or "F") and his or her present age. Finally, circle the entry which represents yourself.

	<u>SEX</u>	<u>PRESENT AGE</u>
1. Oldest	___	___
2. Second	___	___
3. Third	___	___
4. Fourth	___	___
5. Fifth	___	___
6. Sixth	___	___

(Continue in the margin if necessary)

THANK YOU VERY MUCH FOR YOUR COOPERATION.

APPENDIX B

MATERIALS USED IN EXPERIMENT

Note on Contents

I. Discussion problem. Subjects read the problem and made their initial recommendations before the Waiting Period, and then discussed the problem during the Discussion Period.

II. Form A. Completed by subjects after the Discussion Period, upon their arrival in separate rooms.

III. Case report. Read by subjects for one minute, before being interrupted and asked to begin canceling numbers.

IV. Form B. Completed at the end of the experiment, after helping measure had been obtained.

I. DISCUSSION PROBLEMCase P

Mr. M is contemplating marriage to Miss T, a girl whom he has known for a little more than a year. Recently, however, a number of arguments have occurred between them suggesting some sharp differences of opinion in the way each views certain matters. Indeed, they decide to seek professional advice from a marriage counselor as to whether it would be wise for them to marry. On the basis of these meetings with a marriage counselor, they realize that a happy marriage, while possible, would not be assured.

Imagine that you are advising Mr. M and Miss T. Listed below are several probabilities or odds that their marriage would prove to be a successful and happy one.

Please check the LOWEST probability that you would consider acceptable for Mr. M and Miss T to get married.

_____ Place a check here if you think Mr. M and Miss T should not marry, no matter what the probabilities.

_____ The chances are 9 in 10 that the marriage would be happy and successful.

_____ The chances are 7 in 10 that the marriage would be happy and successful.

_____ The chances are 5 in 10 that the marriage would be happy and successful.

_____ The chances are 3 in 10 that the marriage would be happy and successful.

_____ The chances are 1 in 10 that the marriage would be happy and successful.

II. FORM A

1. On the following scales, indicate your impression of your partner, based on his or her behavior in the experiment up to now. Place a check anyplace on the line, at the point which best describes your impression.

_____ | _____
COLD WARM

_____ | _____
LIKABLE UNLIKABLE

_____ | _____
SELFISH UNSELFISH

_____ | _____
FRIENDLY UNFRIENDLY

_____ | _____
INSINCERE SINCERE

_____ | _____
GOOD-LOOKING BAD-LOOKING

2. On the following scales, indicate your impression of how you felt during the discussion with your partner. Place a check anyplace on the line, at the point which best describes the way you felt.

_____ | _____
INVOLVED UNINVOLVED

_____ | _____
COMFORTABLE UNCOMFORTABLE

_____ | _____
BORED INTERESTED

_____ | _____
RELAXED TENSE

_____ | _____
IRRITATED NOT IRRITATED

_____ | _____
NOT EMBARRASSED EMBARRASSED

III. CASE REPORT

THE CASE OF MR. AND MRS. BROWN

Mrs. Brown, an attractive young woman of 28, had been married for three years and had known her husband for three years prior to their marriage. She thought of him as strong, reliable, and intelligent. During the courtship the relationship had "matured and developed," and she had looked forward to marriage.

Their difficulties began when they had been married for about a year and a half. There were an increasing number of bitter quarrels and arguments, with long periods of angry silence in between. She became irritated by her husband's overly cautious, unspontaneous, methodical behavior. While this had not offended her earlier, she found herself growing increasingly tense and exasperated about it, since she herself was spontaneous and outgoing.

While the contrast between them had originally seemed a healthy combination of opposites, these difficulties were now keeping them in perpetual conflict. The satisfactions in their marriage had drained off, their sexual relationship had been affected, and the many values and gratifications she had known earlier in the relationship had slipped through her fingers. She could not see herself going on unless some change took place.

Mr. Brown is 30 years old, a chemist, and the only son of well-to-do parents. His father is a moderately successful attorney, and his family was considered to be rather "close." There was no open friction, and there had been a great deal of joint family activity. Always a "family man," the father had taken his son to ball games, movies, and

the like. However, he was a most exacting task-master, a perfectionist when it came to such matters as cleanliness, morals, marks, and achievement in school.

Mr. Brown's mother was a very ambitious, driving woman with elaborate plans for her son, and when he was quite young he sensed that in order to find a secure place and earn the acceptance of his family he must produce honors. He would be loved and judged less for himself as an individual and more for his performances and achievements.

This situation was exemplified in an experience he recalled having at the age of seven. While he was doing his arithmetic homework, his father's arm shot out from over the boy's shoulder, picked up the paper, and tore it to bits. The resentment and hostility of this act were not due to the fact that the boy's work was incorrect, but because it was sloppily written and some numbers had been placed below the line. The incident indelibly impressed upon the boy the standard demanded by his father and the penalties to be expected in the event of failure to live up to his expectations.

Mr. Brown's mother was constantly comparing him with other children. Was he taller, stronger, smarter? Were his grades better? Did his teachers prefer him to the others? Whatever he did was under the closest surveillance, with the result that he always had a feeling something more was expected of him.

It was Mr. Brown's steady, clear-thinking, well-organized approach to life that had first attracted his wife. This compensated for a part of herself that was lacking. Mr. Brown, in turn, was drawn to the outgoing, spontaneous qualities he thought he saw in Mrs. Brown.

During their courtship and at the beginning of their marriage, Mr. Brown relied heavily on his wife's social grace. It was she who broke the ice and made new friends. With her help he found it much easier to communicate with people and participate in social events. For her part, Mrs. Brown was comforted by the thought that his steadfastness would serve as a check against her "going too far." She was pleased that her friends and acquaintances regarded him as a reliable person to whom they could turn for advice. Each counted on these respective qualities in the other, leaned on them, and was supported by them.

The events that precipitated the subsequent crises were usually not initiated as a result of Mr. Brown's behavior toward Mrs. Brown personally. The events that precipitated crises always involved one or more other persons, as, for instance, when they went to the theater with friends. During intermission there would be an exchange of interested and critical appraisal. Mrs. Brown said that when her husband was asked his opinion he would comment that it was only the first act and he wanted to wait and see the rest of the play before expressing his views.

Again, while discussing politics with friends (most of whom seemed to think alike), her husband would always imply that things weren't strictly black and white, and that perhaps some consideration should be given to "the other points of view." Thus, while Mrs. Brown would pick up the feeling tone of the group, move with it, and become most articulate in expressing their view, Mr. Brown wanted to mull things over and examine all sides before committing himself.

The Browns would take each incident home with them and relive it over and over again. She would chastise him for alienating people and losing friends (a charge which was completely unfounded). Then she

would grow bitter and hostile and lose control. He would try to argue and then withdraw into a sullen silence, going into the other room to "work." His silences infuriated her and at the same time made her increasingly anxious.

In fact, it was rather clear that Mrs. Brown did not essentially disagree with her husband. More often than not, she shared his opinion about the theater, politics, community activity, and the like. Her own pattern of being most anxious about the group attitude was clearly distorted out of all proportion, since it was evident that the Browns held an important place within the group and were highly regarded.

IV. FORM B

1. The following questions deal with your reactions to the case report that you read in this room.

a) How much of the Case Report were you able to read?

Less than 25%
 25 to 50%
 50 to 75%
 More than 75%

b) How much of the content of the Case Report would you say that you recall right now?

Less than 25%
 25 to 50%
 50 to 75%
 More than 75%

c) How much do you think you will enjoy reading the rest of the Case Report?

NOT AT ALL
 VERY MUCH

d) How much do you think you will enjoy discussing the Case Report?

NOT AT ALL
 VERY MUCH

e) How did you feel while you were reading the Case Report? In each case place a check anyplace on the line, at the point which best describes the way you felt.

INVOLVED
 UNINVOLVED

COMFORTABLE
 UNCOMFORTABLE

BORED
 INTERESTED

RELAXED
 TENSE

IRRITATED
 NOT IRRITATED

NOT EMBARRASSED
 EMBARRASSED

2. The following questions deal with your reactions to the number-canceling task.

a) How much did you enjoy doing the number-canceling task?

_____ | _____
NOT AT ALL | VERY MUCH

b) How did you feel while you were doing the number-canceling task?

_____ | _____
INVOLVED | UNINVOLVED

_____ | _____
COMFORTABLE | UNCOMFORTABLE

_____ | _____
BORED | INTERESTED

_____ | _____
RELAXED | TENSE

_____ | _____
IRRITATED | NOT IRRITATED

_____ | _____
NOT EMBARRASSED | EMBARRASSED

c) How much time do you think went by while you were doing the number-canceling task? Please put down your best estimate, to the nearest ten seconds.

_____ minutes, _____ seconds

3. Were you given the choice between continuing with the number-canceling task and returning to the Case Report?

_____ Yes _____ No

(If "Yes," answer the following two questions.

If "No," skip to Question 4.)

a) Which did you choose? _____ To continue canceling numbers

_____ To return to the Case Report

b) Why did you make that choice?

4. Once again, indicate your present impression of your partner, based on his or her behavior in the experiment up to now.

COLD		WARM
LIKABLE		UNLIKABLE
SELFISH		UNSELFISH
FRIENDLY		UNFRIENDLY
INSINCERE		SINCERE
GOOD-LOOKING		BAD-LOOKING

5. The following questions deal with your impressions of the experiment as a whole up to this point.

a) What is the general purpose of the experiment?

b) Why were you and your partner put into separate rooms?

c) What is the purpose of the number-canceling task?

d) Any other impressions or comments:

APPENDIX C
FOLLOWUP QUESTIONNAIRE

April 11, 1969

Dear Student:

At the end of October you and your boyfriend or girlfriend participated in a study of dating relationships. I have been making slow but steady progress in analyzing the results of the study, and expect to complete my report of the results by the end of June. Meanwhile, I would like to request your help once again. I would be most grateful if you could take the two or three minutes required to answer the follow-up questions below, and then return the sheet to me in the enclosed envelope. As before, your responses will be completely confidential. When the data are analyzed, you will be known to us only by number, not by name. Also, please complete the form privately, without checking your responses with your boyfriend or girlfriend (or anyone else). Thanks very much for your help.

Cordially,
Zick Rubin

I.D. # _____

1. Sex: _____ F _____ M

2. What is the present status of your relationship with the person with whom you filled out the questionnaire at the end of October?

_____ No longer _____ Dating _____ Going _____ Engaged _____ Married
dating together

2a. If you are no longer dating that person, which of you was primarily responsible for the break-up?

_____ I was _____ He or she was _____ It was completely mutual

3. What is your best estimate of the probability that you and that person will marry one another?

_____ 0-10% _____ 11-20% _____ 21-30% _____ 31-40% _____ 41-50% _____ 51-60% _____ 61-70% _____ 71-80% _____ 81-90% _____ 91-100%

4. Since the end of October, would you say that your relationship with the person with whom you filled out the questionnaire has become more or less intense?

_____ Much less _____ Less _____ No change _____ More _____ Much more
intense intense intense intense intense

5. Are both you and that person still in the Ann Arbor area? ___Yes ___No

5a. If "No," please explain:

6. I would be extremely interested in any comments which you might have about any aspect of the study in which you participated. In particular, I would be interested in learning whether you think your participation had any effect, either favorable or unfavorable, upon your relationship. If you have any such comments, please write them on the back of this sheet. Thanks again for your cooperation.

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