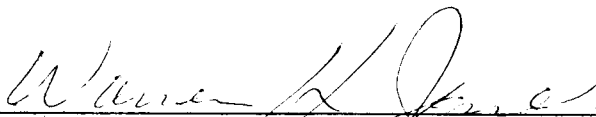


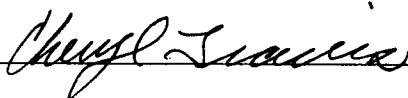
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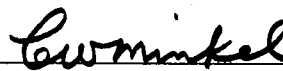

Warren H. Jones, Major Professor

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INTERPERSONAL CORRELATES OF LOVE STYLES

A Thesis

Presented for the

Master of Arts

Degree

The University of Tennessee, Knoxville

Kendra Michelle Gray

August, 1996

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Dedication

This thesis is dedicated to my parents, Carol Ann Ranta and David Edward Gray, and to my step-parents, Kirk Ranta and Mary Gray, who have meant everything to me.

Acknowledgments

I wish to express my sincere appreciation to those who have made my experience at the University of Tennessee an invaluable one. A number of graduate students have given me their support and friendship over the past two years, and I am hopeful these relationships will endure. I would like to extend special thanks to Jeff Adams for his generous assistance in the statistical procedures and matters in this thesis, and also to Felicia Jimerson, for her genuine friendship.

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Finally, I want to thank Javier for his tremendous support, and for believing in me.

Abstract

The present study addressed the frequently invoked distinction between passionate and companionate love as proposed by Walster and Walster (1978), using The Love Attitudes Scale (Hendrick & Hendrick, 1986) as a surrogate measure for both kinds of love. The Love Attitudes Scale (LAS) measures Lee's (1976) six love styles; three of these love styles, Eros (passionate love), Ludus (game-playing love), and Mania (manic love), represented Walster and Walster's (1978) passionate love, whereas the remaining love styles, Storge (friendship love), Pragma (practical love), and Agape (selfless love), represented companionate love as conceptualized by these authors. The LAS was administered to 276 (64 male and 191 female) undergraduate students, and was compared to other measures of commitment, trust, life and relational satisfaction, guilt, and loneliness as a means of exploring the ostensible difference between passionate and companionate love and of further explicating the nature of companionate love. Results of correlational analyses raised questions regarding the utility of the distinction, as there was considerable overlap among one of the companionate love styles and three of the passionate love styles. Also, similar correlates emerged between the relational measures and one passionate and one companionate love scale; thus, current conceptualizations of two distinct kinds of love were not supported by the data.

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I. Introduction

Theorists have advanced many diverse conceptions of romantic love, referring to it as an emotion of either a sedate or passionate nature, a set of behaviors and cognitions, or an individual orientation. Some researchers have defined love as a dyadic bond characterized by exchanges of needing and giving, whereas others have posited that love is rooted in parent-child bonds, or that the quality of adult romantic relationships is influenced in part by childhood experiences and personality. According to Hendrick and Hendrick (1986), although the primary emphasis on love research has been on theory building, researchers have begun to develop classifications of love based on empirical research. More specifically, theorists have addressed the issue of whether love in romantic (*i.e.*, dating and marital) relationships consists of a single general dimension or several dimensions. Several studies (*e.g.*, Dion & Dion, 1973; Rubin, 1970; & Sternberg & Grajek, 1984) have used factor analytic procedures to determine if, for example, there is a general factor of love which is consistent across romantic and familial relationships and friendships.

Recurrent in the literature, however, is the idea that most people experience two different kinds of love. The first kind of love, often referred to as romantic (*e.g.*, Rubin, 1970) or passionate love (*e.g.*, Berscheid & Walster, 1974), has been described as an intensely emotional state which is short-lived in most relationships. The second kind of love, labeled as companionate (Walster & Walster, 1978) or conjugal (Driscoll, Davis, & Lipetz, 1972) love, refers to a

more stable, committed, intimate bond. It is this kind of love which eventually forms the basis for many couples' marriages and long-term relationships.

Those theorists who have taken particular interest in romantic/passionate love have developed various kinds of measures to study the phenomenon. Also, these scholars have identified and classified different facets of romantic love. For example, Berscheid and Walster (1974) suggested that passionate love can be characterized not only by attraction and sexual intimacy, but also by jealousy, obsession, misery, and dependency. Walster and Walster (1978) later suggested that passionate love eventually wanes and develops into an enduring close relationship, or companionate love. However, much of their research, like that of other love researchers, has tended to focus primarily on passionate love to the exclusion of companionate love. Therefore, many questions remain concerning the dynamics and ostensible evolution of passionate into companionate love relationships.

By contrast, Lee (1976) proposed a theory of six different kinds of love styles: Eros (passionate love); Ludus (game-playing love); Mania (dependent love); Agape (selfless love); Storge (friendship love); and Pragma (practical love). Lee (1976) did not attempt any global, singular definition or conception of love; rather, he viewed love as a multifaceted phenomenon which is individually defined. That is, love is a unique experience involving, for some individuals, companionship and commitment. For others, Lee (1976) argued, love involves overwhelming passion with the excitement that comes from engaging in many noncommitted love relationships.

Hendrick and Hendrick (1986) generated the *Love Attitudes Scale*, a valid and reliable inventory based on Lee's typology which can serve as a useful tool in assessing the utility of Walster and Walster's (1978) model of passionate versus companionate love. Specifically, the concept of passionate love appears to be contained in Lee's (1976) conceptualizations of Mania, Eros, and Ludus, whereas the definition of companionate love appears to translate into Storge, Pragma, and Agape. Moreover, Hendrick and Hendrick's (1986) measure assesses the dynamics of various companionate love styles not represented by other measures of love. Thus, it was the purpose of the present research to explore the distinction between passionate versus companionate love by comparing these surrogate components (*i.e.*, love styles) with measures of relevant relational constructs. Specifically, responses to Hendrick and Hendrick's (1986) inventory were compared to selected measures of relational variables, such as trust, commitment, trait guilt, loneliness, satisfaction with life, and relationship satisfaction.

Objectives of the Study

As an exploratory study, one goal of the present research was to further identify and explicate the differential love styles articulated by Lee (1976) and measured by Hendrick and Hendrick (1986). In addition, this study explored the concept of companionate love as operationalized by the subset of styles outlined above (*i.e.*, Storge, Pragma, and Agape) and especially the divergence of these indices of companionate love from the measures more clearly reflecting passionate love.

II. Review of the Literature

Historical Perspectives on Love

Researchers' interest in romantic love may be attributed to its presumed role as the *sine qua non* of dating and marital relationships (Hatfield, 1988). However, according to Campbell (1988), love did not emerge as the basis of courtship and marriage until the 17th century; prior to this period, romantic love was experienced most often by lovers in extramarital affairs, not by couples whose marriages were arranged. For Campbell (1988), 12th century poets, or troubadours, influenced the emergence of romantic love as an incentive to marry. According to this author, the troubadours introduced the notion of romantic love as a personal ideal, involving adoration for and relentless pursuit of one's beloved. Furthermore, Campbell (1988) contended, the troubadours' interest in the psychology of love as expressed in their lyric poetry became influential and led to the slow ascendance of love as an important factor in romantic relationships.

For Mellen (1981), however, romantic love evolved from a biological necessity. In this view, love served as a "bonding mechanism" so that males, whose role in the emotional facets of child-rearing was ancillary, would have a means of bonding with their partner during the long period of infant-mother attachment. Additionally, for Guttentag and Secord (1983), romantic love may have served a short-term courting function for men during periods of high sex ratios of males to females. During such periods, women potentially could be

more selective in their choice of mating, and thus in reproduction. Romantic love, according to these authors, may have been usefully applied by men to ensure their gaining some control over courtship and mating.

The Nature of Love. Early literature characterized love as a unidimensional phenomenon, such as an extension of an individual's outlook, or as a single emotion. Scholars typically did not explore qualitatively different experiences of love relationships, or love as a unique experience involving a host of behaviors, cognitions, and emotions (Murstein, 1988). For example, a recurring theme in the psychological literature was the idea that romantic love reflects some personality inadequacy or a lack of self-fulfillment. Specifically, Askew (1965) referred to love as a disease, whereas Koenigsberg (1967) argued that love is a projection of competitiveness with a parent. For Freud (1953), romantic love is sublimated sexuality. In this view, falling in love involves idealization of the "love object", and once love is consummated it is usually extinguished. Klein and Riviere (1953) contended that love grows out of one's dependency on others. For these authors, love arises out of a lack of personal fulfillment in the person who experiences it, and is likely to dissipate rapidly. Other theorists have suggested that the need to love instead reflects a normal, healthy personality; moreover, love has often been associated with benevolence and self-fulfillment. Fromm (1956), for example, identified love with responsibility, and caring for and respecting one's partner, and May (1953) regarded love as an affirmation of one's own value.

Global Theories of Romantic Love

By contrast, more global approaches to the study of love have explored the phenomenon in its entirety. For example, within the past decade, some scholars (e.g., Sternberg & Grajek, 1984) have studied romantic love using various empirical methods, and have suggested that romantic love is a complex entity which consists of a number of cognitive, emotional, and behavioral components. Research by Sternberg and Grajek (1984) suggested that various kinds of relationships differ in terms of the amount of love experienced, but do not seem to differ significantly in the nature of the love experienced. That is, a general factor of love emerged which included a variety of behaviors, emotions, and attitudes, and was common to most love relationships (Sternberg & Grajek, 1984). However, Sternberg (1986) later attempted to show that although the overall structure of love is similar across various love relationships, these components are manifested differently in various types of relationships. He proposed a triangular theory of love, which is so called because, conceptually, the three components—intimacy, passion, and decision/commitment—can be described as forming the vertices of a triangle when combined. The intimacy component includes feelings of closeness and connectedness. In short, this component can be thought of as a measure of emotional investment in another person. Passion involves sexual desire, or a state of arousal which includes a desire for another person. Decision/commitment involves a decision that one loves another and the subsequent commitment to sustain that love.

Sternberg (1988) listed and differentiated among a variety of love relationships. According to the model, the three components can be combined in different ways to form a classification of different kinds of love. That is, *liking* occurs when intimacy dominates a relationship in the absence of passion or decision/commitment. By contrast, *empty love*, or the decision/commitment component alone, results from stagnant relationships in which couples find themselves in marriages which have endured as a routine part of life. *Romantic love* includes intimacy and passion without commitment. Typically, romantic love endures only on the basis of liking and physical attraction, but usually evolves into *companionate love*, in which the passion has dissipated and is replaced by the decision/commitment component. *Consummate love*, however, is the kind of love most couples strive for but is the most difficult to attain, as it is the integration of all three components (Sternberg, 1988).

According to Sternberg's (1988) theory, triangles representing love relationships may be said to vary in their size and shape based on the balance and intensity of the components of love. That is, love relationships which are balanced--in terms of the three components--could be represented by an equilateral triangle. Conversely, an unbalanced relationship might be conceptualized as a triangle that points in the direction of the greater level of a particular component. Greater similarity between partners' triangles, as Sternberg (1988) theorized, increases the likelihood that the two are compatible.

Developmental Approaches. Another approach to the study of love as a multifaceted phenomenon has involved placing love within a developmental

framework. For some scholars, adult love relationships differ in terms of, for example, levels of commitment or emotional involvement in one's partner.

According to some, these differential experiences of love are influenced in part by childhood experiences. More specifically, some theorists (e.g., Money, 1980; Hazan & Shaver, 1987) have posited that the quality of adult romantic love, and of peer relationships as well, depends in part on the quality of early infant-mother bonding.

The research of Hazan and Shaver (1987) suggested there is considerable continuity between the emotional and cognitive development of children and the socioemotional development of young adults. Their research was based in part on the work of Bowlby (1969) who was concerned with the ways in which infants form attachments to their mothers, and how they become emotionally distressed when separated from them. Bowlby (1969) claimed that infants and children form mental models of their attachment figures (e.g., mother and father) and of other significant persons with whom they interact. These models, according to this author, influence a person's social behavior, namely his or her "attachments" to others, throughout life. Hazan and Shaver also based their theory on the research of Ainsworth (1982), who delineated three types of attachments—*Secure* (stable, trusting), *Anxious/Ambivalent* (unsure, anxious), and *Avoidant* (distant)—to describe varieties of infant-caregiver bonds.

In their research, Hazan and Shaver (1987) developed statements representative of each attachment style. When respondents were asked which of the statements described the way they relate to others, over half chose the secure

attachment statement (e.g., "I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me") as descriptive of themselves (Hazan & Shaver, 1987). Furthermore, the authors found that people who, for example, reported having a warm and secure relationship with their parents also reported experiencing happier and more enduring kinds of adult relationships than people who reported having less secure relationships with their parents (Hazan & Shaver, 1987).

Two-Component Theories of Love

As suggested earlier, some theorists contend that people seem to experience two different kinds of love. Although researchers have used different terms to refer to them, the first kind denotes an experience fueled primarily by sexual attraction and intense, sometimes irrational emotions. By contrast, the second refers to a more stable, rational, and committed, genuine love which has been compared to friendship/liking or a long-term companionship (e.g., Peele, 1988). For example, Wilson (1981) argued that romantic love serves primarily to propagate the species and is extinguished after couples have children. Furthermore, he asserted that it is companionate love, similar to a long-term, close friendship, that sustains the relationship thereafter.

Clinical Perspectives. Some perspectives have typically dichotomized love based on an apriori notion of "genuine" love. Specifically, a common clinical view is that passion or romance (e.g., Peck, 1978; Peele, 1988), often characterized by jealousy and interdependency, is often mislabeled as love. This

experience of "non-love"/dependent love is viewed as short-lived and unstable and likely to develop into obsession. By contrast, hard work and commitment enable genuine, healthy companionship to survive after many years. (e.g., Peck, 1978).

An early theory proposed by Reik (1941) suggested that passionate love derives from one's dissatisfaction with self and lot in life. Furthermore, this kind of love is built upon idealization of the other, occurring when a lover recognizes desirable qualities but fails to see his or her partner's flaws or shortcomings. It is companionship, Reik argued, which arises after passion dissipates.

Companionship, according to this author, is built only with partners' acknowledgement of each others' strengths and weaknesses. Maslow's (1962) view was similar, but deficiency-motivated love (D-love), as he called it, derives from a need to love and is not always reflective of a lover's unhappiness. According to Maslow (1962), such type of love is inevitable at times, but a relationship built upon D-love often results in anxiety, possessiveness, and hampers the partner's ability to experience personal growth. He distinguished the latter kind of love from B-love, or Being-motivated love, characterized by nonpossessive and autonomous love. Those who experience B-love have achieved an unusually high level of psychological functioning, or are self-actualizing, according to this view.

More recently, Tennov (1979) introduced the idea of *limerance*, or a kind of obsessive, cognitive-emotional experience, during which time the person in love fantasizes and idealizes the limerant object. Tennov (1979) distinguished

limerance from genuine love, or a caring and concern for the other. Limerance is an obsessive state of mind which thrives on uncertainty and is one way of falling in love. This kind of obsessive love is similar to Peele and Brodsky's (1976) notion of addictive love. These authors juxtaposed love and addiction, asserting that the two are polar opposites. Thus, love is defined in opposition to addiction. More specifically, love involves both offering and accepting criticism; addiction involves idealizing and ignoring each others' faults. Love also should enhance each others' capacity for growth, whereas addiction, concerned with preoccupation with fulfillment of one's own needs, is often at the expense of one's partner. Furthermore, whereas addiction is typically a painful experience, love is an intensification of life's pleasurable experiences. Peele (1988) later argued that those who experience addictive love often misinterpret their painful feelings and dependency as a natural part of romantic, passionate love. This confusion about the nature of love, according to his view, stems largely from western culture's traditional notion of passionate or romantic love. More specifically, the kind of love often portrayed in literature and other media reinforces addiction rather than love.

A very similar theory of love is that of Peck (1978), whose argument was that *falling in love*, an ephemeral experience of intense passionate emotions, is not love at all, but a cultural myth which ends in couples' disillusionment concerning the nature of love. Furthermore, after couples inevitably fall out of passionate love, they may experience *genuine love* thereafter. For Peck (1978), genuine love

is not an emotion, but a more stable, volitional kind of love involving an act of will to be committed to a relationship.

Loving versus Liking. Some social psychological theories have attempted to explain love by relating the construct to liking or friendship. For example, Blau (1964) proposed that love is intense liking rooted in an exchange relationship. Specifically, he likened love relationships to a marketplace exchange, in which individuals can incur rewards or costs based on what is exchanged. In his view, a satisfying exchange is one in which rewards and costs are in balance.

Rubin (1970) was one of the first to propose that loving is an interpersonal attitude which is distinct from liking. In order to determine if the two phenomena differ conceptually, he developed two scales to measure the phenomena. Rubin (1970) asserted that love is an interpersonal attitude, and he based the content of the items for the love scale on current and popular conceptualizations of romantic love. Specifically, items for this scale referred to various attitudes, emotions, and behaviors frequently associated with romantic love, such as physical attraction, idealization of each other, and desire to share emotions and experiences with one's partner. He developed a parallel questionnaire to measure liking, and it includes items reflecting admiration and respect for another.

Rubin proposed a three-component theory of love based on an analysis of his scale items, which comprised three clusters: affiliative and dependent needs (e.g., "If I could never be with ____, I would feel miserable"); predisposition to help (e.g., "If ____ were feeling badly, my first duty would be to cheer him/her

up"); and exclusiveness and absorption (e.g., "When I am with ____, I spend a great deal of time just looking at him/her"). This author emphasized that love is a multifaceted phenomenon; that is, it is an "attitude held by a person toward a particular person, involving predispositions to think, feel, and behave in certain ways toward that other person" (Rubin, 1970, p. 265).

Rubin's (1970) research indicated that love-scale scores correlated moderately with scores on the liking scale. Moreover, the love scores of men (for their girlfriends) and those of women (for their boyfriends) were almost identical, but women's scores for liking their boyfriends were higher than men's scores for liking their girlfriends. Additionally, Rubin (1970) found that people reported loving their romantic partners significantly more than they reported loving their friends, but they reported liking their partners only slightly more than they reported liking their friends. Moreover, couples with high loving scores also made significantly more eye contact (i.e., "gazing" into each other's eyes) than those not in love, a possible manifestation of the exclusivity and absorption component of love as measured by Rubin's scale (Rubin, 1970).

In subsequent research, Dion and Dion (1975) used Rubin's Love Scale and other measures to explore individual differences in the experience of romantic love. Their research suggested that, for example, people with higher self-esteem reported experiencing romantic love more frequently. However, the *intensity* of romantic love experiences was greater for those lower in self-esteem (Dion & Dion, 1975). Furthermore, as these researchers reported, individuals higher in self-actualization reported more satisfying love experiences than persons lower in

self-actualization. However, those higher in self-actualization also reported less need and less caring for their romantic partner. Dion and Dion (1988) also explored the role of trust in loving and liking relationships among dating, engaged, and married couples using Rubin's measure. These researchers reported that dating couples had lower love scores than engaged or married couples, and that individuals in dating relationships reported that they liked and trusted their partners more than they loved them. Furthermore, trust scores were higher for married couples than for those in a dating relationship.

Davis and Todd (1982) also conceptualized love as it relates to liking. These researchers proposed that liking, as in friendship, can be understood in terms of eight elements: trust, equality, mutual concern, confidence, enjoyment, understanding, respect, and spontaneity. They also suggested, however, that loving is characterized by a combination of two clusters of feelings added to friendship. Namely, passion, which includes fascination with each other, sexual desire, and exclusiveness of the couples' relationship, and caring, or giving of oneself to the other combine to characterize a loving relationship. Research by Davis and Todd (1982) indicated that spouses/lovers as compared to close friends do not differ significantly in terms of the qualities of friendship as conceptualized by these authors. However, spouses and lovers report a great deal more passion (i.e., fascination with each other, sexual desire) than do close friends (Davis & Todd, 1982). Thus, Davis and Todd viewed loving as liking, with added passion and caring for one another.

Love as Dichotomous. A different approach to studying two kinds of love was that of Fehr (1988), who suggested that Rosch's (1973) cognitive psychological research on prototypes could usefully be applied to her own theory of prototypical features of love. Fehr (1988) identified Walster and Walster's (1978) concepts of passionate and companionate love as *a priori* categories into which features of love could be categorized. Her research involved a feature-listing approach in which university students were asked to generate features they considered central to love relationships. As Fehr (1988) reported, the most frequently listed features were caring, happiness, desire to be with the other, friendship, and intimate disclosure to one's partner. Moreover, individuals reported that altruistic acts such as helping, doing things for the other, sacrifice, and placing the partner's needs above one's own emerged as central features of love. Additionally, Fehr (1988) asked participants to rate these features for prototypicality. Those which received the highest ratings were trust, caring, honest, respect, and friendship, and the lowest ratings were assigned to euphoria, gazing at each other, uncertainty, and dependency. According to this author, the features which received the highest typicality ratings reflect qualities of Walster and Walster's (1978) companionate love, whereas those which received the lowest ratings portrayed these authors' conception of passionate love. Thus, companionate features seemed to be central to the layperson's view of love, and passionate features were seen as more peripheral, according to Fehr (1988).

Driscoll, Davis, and Lipetz (1972) also suggested that love is dichotomous. According to these theorists, romantic love is inclusive of needs, feelings of

exclusiveness and idealization of the beloved, physical attraction, and passion. However, the research of Driscoll, et al. (1972) indicated that over time, romantic love develops and changes. Specifically, couples usually begin to regard the relationship much like a friendship, a phenomenon which Driscoll, et al. (1972) referred to as conjugal love. According to these authors, certain factors, such as trust and increasing acceptance of partner's faults, emerged as significant facets of conjugal love relationships--especially marriages.

Conjugal love, according to Driscoll and his colleagues, evolves out of a secure and mutually satisfying relationship. This kind of companionship is characterized by trust, appreciation, respect, acceptance of the other's faults, sharing, and willingness to help the other (Driscoll, et al., 1972). The components of conjugal love, especially trust, do not need to be present in romantic love, according to these researchers. In fact, as these researchers suggested, the feelings of uncertainty and challenge which often characterize love indicate that mutual trust may be in question in the early stages of romantic love (Driscoll, et al., 1972).

A similar but more detailed theory was proposed by Walster and Walster (1978), who instead termed the distinction between two kinds of love as passionate versus companionate. Berscheid and Walster (1974) argued that passionate love is nothing more than intense physiological arousal fueled by an interplay of conflicting emotions, such as ecstasy and misery. These authors used Schachter's (1964) theory of emotion as a means of describing the dynamics of passionate love. They proposed that, as in accounting for any emotional state,

passionate love exists given that two conditions are present: physiological arousal and cues in the situation which dictate to a person that passionate love is an available and fitting label for feelings of the individual in question. Passionate love seems to be heightened by a combination of both positive and negative experiences. Specifically, need for attention, loneliness, acceptance, frustrations of miscommunication, preoccupation with a loved one, and jealously all fuel passion, according to this view (Hatfield, 1988). Moreover, Hatfield (1988) argued, persons who experience painful emotions love others not in spite of the pain, but because of it. However, such passion, so the argument goes, eventually dissipates and usually evolves into enduring feelings of fondness and acceptance (companionate love) assuming that the relationship has been built on a number of positive experiences.

Hatfield (1988) proposed that companionate love, defined as "the affection we feel for those with whom our lives are deeply entwined" has little passion but a great deal of commitment and intimacy" (p. 205). Furthermore, she argued that in companionate relationships, couples' thoughts, actions, and emotions are closely intertwined (Hatfield, 1988). That is, the relationship is characterized by strong interdependence; hence, termination of the relationship can severely disrupt a person's life. Although the conflicting emotions and frustrations of miscommunication, uncertainty, and jealousy fuel passionate love, the same experiences, according to Hatfield (1988), actually decrease feelings of companionate love.

Hatfield and Sprecher (1986) later devised the **Passionate Love Scale (PLS)** which contains items assessing indicators of longing for union with another—a central characteristic of passionate love. More specifically, the scale includes items which address the cognitive, emotional, and behavioral components of passionate love, such as preoccupation with and idealization of the other; sexual attraction, and maintaining physical closeness and actions which are aimed at determining the others' feelings.

However, despite the utility of the passionate versus companionate love distinction and the frequency with which it is cited in the literature, no comparable measure was designed for companionate love. Hence, the argument that the two general kinds of love are common to most relationships remains largely unexamined in empirical research. According to Byrne and Murnen (1988), because research has focused almost exclusively on passionate love and attraction, researchers have tended to extrapolate from their findings on passionate love to explain the nature of companionate love relationships. Companionate love has thus become a miscellaneous category for any characterization of love which cannot be labeled as passionate, that is, love in which passion has dissipated and is seemingly more stable and committed. But defining companionate love as the aftermath of passionate love, or the absence of passionate love, leaves several unanswered questions.

Foremost among the questions which have not been addressed by Walster and Walster's (1978) model involves the ostensible development of passionate into companionate love. Specifically, there are no data to address the proportion of

couples who actually experience this transition or how it occurs. Furthermore, according to Aron and Aron (1994), the idea that passion declines over time has been widely theorized but has not been supported as strongly by research. Specifically, research by Traupmann and Hatfield (1981) and another study by Tucker and Aron (1993) examined the course of passionate love over time. Both studies indicated that passionate love does decline over a major transition in the relationship, such as the period following the birth of a child. However, Traupmann and Hatfield (1981) found that couples who had been married for the longest period of time (i.e., more than 30 years) reported experiencing a great deal of passion for their mates. As Aron and Aron (1994) argued, the ostensible decline of passion in long-term relationships seems to be less precipitous and more gradual and/or variable than the literature suggests. Furthermore, these authors asserted, Walster and Walster's theory, for example, does not account for periods in many marriages in which couples may experience passion intermittently in their relationship (Aron & Aron, 1994).

Lee's Colors of Love Theory

An extensively cited theory of love was proposed by Lee (1976), who developed a research paradigm based on structured interviews. In his research, Lee (1976) drew from a variety of literary and historical accounts and descriptions of love which have emerged over the past 2,000 years, including nonfictional and philosophical narratives. Additionally, he recorded over 4,000 statements and classified them based on their description of various facets of love (e.g., jealousy, commitment). Lee then labeled the descriptions according to their

characteristics, borrowing from Greek and Latin terminology. For example, *Mania* is one of six love types Lee identified and denotes a cluster of jealousy, distress, possessiveness, and ambivalence (Lee, 1988). In addition, Lee collected descriptions of love relationships from English and Canadian participants, including how the relationship started, the satisfactions and problems involved, and related behaviors and feelings of the partners. To systematically record the love accounts, he developed the "Love Story Card Sort", comprised of fifteen hundred cards which essentially forms a love story from which participants were asked to choose the card that appropriately described their story.

From these data, Lee (1976) then proposed a typology of love which describes many different kinds of love relationships, or styles of love. Lee (1976) likened his typology to a color wheel, classifying three *primary* styles of love--Eros, Storge, and Ludus--which can be paired to form compounds or *secondary* styles of love, called Mania, Pragma, and Agape.

According to Lee (1976), Eros is passionate love. Erotic lovers tend to believe in "love at first sight", or the experience of strong attraction and approval toward the other person aroused at the first meeting. Erotic lovers tend to emphasize the importance of physical attraction and seek out a partner who conforms to a physical prototype. Furthermore, there is usually a desire to develop a quick rapport with the partner, involving disclosures which are honest and sincere. Additionally, erotic lovers often develop early sexual relations with their partner, and are not intimidated by the intensity of emotions in a romantic relationship.

Storge, according to Lee (1976), often develops between two people who have known each other for a long period of time, and for whom feelings of affection resemble those between siblings. For the storgic lover, love is not expected to be exciting or emotional. The importance of sexual relations is typically deemphasized, as well as the search for an ideal physical type. Furthermore, sexual experiences are shared only after a strong commitment is made to the partner. In short, love develops much like in a friendship, but the storgic lover, placing limited importance on the need for a love relationship, can be contented with or without its development.

For ludic lovers, in Lee's (1976) description, love is much like a game or sport. Ludic lovers assume a detached, uncommitted role in a relationship. Furthermore, they prefer being nonmonogamous, and perceive deceit and insincerity within the relationship as part of "rules of the game". Furthermore, ludic lovers are somewhat frustrated in their adult lives and usually engage in several noncommitted relationships as a way of avoiding conflict which sometimes arises in long-term relationships. The ludic lover is neither jealous nor possessive, and may actually encourage his/her partners to have other sexual relationships.

Lee (1976) describes Mania as a compound of Eros and Ludus. The typical manic type yearns for love but expects it to be painful. Manic lovers generally experience an unhappy childhood and are lonely in their adult life. For this reason, Lee (1976) argues, manic lovers tend to be demanding of time, attention, and affection from their partner, and are usually possessive toward their lover. In

addition, manic lovers typically have an ambivalent attitude toward their partner (e.g., feelings of frustration and yearning). This attitude usually develops into an obsession with the lover, and the relationship often ends unhappily, with the manic lover's attempt to abuse him/herself (e.g., non-lethal suicide) in order to gain attention from the partner.

Pragma, often termed "shopping list love", is a compound of Ludus and Storge. It is so called because, as Lee (1976) indicated, pragmatic lovers look for qualities in a mate deemed suitable for their needs. This calculating intent of pragmatic lovers defines the view of the ludic lover. However, unlike the ludic lover, pragmatic lovers often place a great deal of importance on satisfying each other's practical needs, and this desire for compatible companionship resembles those needs of the storgic lover. The pragmatic type wants to avoid emotionally intense relationships and believes intimacy and sexual relations should develop slowly over time.

For Lee (1976), Agape (a compound of Eros and Storge) is a kind of love which closely resembles the Christian ideal of self-sacrifice. Agape is the least common style of loving, according to Lee, as this love style is characterized by selfless and giving attitudes. Furthermore, it involves concern for the partner's welfare, is removed from self-interest, and is primarily cognitive as opposed to emotional, at least in principle. The agapic lover considers it a duty to love, even when no loving feelings are present. According to Lee (1988), agapic lovers redirect passionate desire (Eros) for their partners by finding union with God.

Agape reflects Storge's emphasis on friendship, but agapic lovers act as faithful servants.

Lee is credited with devising a theoretically rich and multidimensional typology (Sternberg, 1986). Hendrick and Hendrick (1986) note that Lee's typology has the ability to subsume findings in previous studies of love. Specifically, these authors argued that exchange theory can be conceptualized as the basis for pragma, while Dion's and Dion's (1973) Volatile, Circumspect, and Rational factors resemble Lee's (1976) Mania, Storge, and Pragma, respectively. Furthermore, according to Hendrick and Hendrick (1986), Berscheid and Walster's (1974) passionate love resembles Mania and Eros, and Walster and Walster's (1978) conceptualization of companionate love is best represented by Storge, Agape, and Pragma. Woll (1989) contends that Lee's typology is useful because it emphasizes consistent individual differences in people's love orientations while it simultaneously places these dispositions within an interpersonal context. Such an approach, Woll (1989) argues, emphasizes the dyad rather than focusing exclusively on the individual in the relationship.

Lasswell and Lasswell (1976) developed a measure of Lee's love styles called the SAMPLE profile (Storge, Agape, Mania, Pragma, Ludus, and Eros), a set of fifty statements with an agree-disagree response format. Each statement was designed to reflect the ideological content of the love styles. Hendrick and Hendrick (1986) built on the work of Lasswell and Lasswell and developed the 42-item **Love Attitudes Scale (LAS)**, a measure which contains seven items for

each of the six love styles. The LAS has been used in subsequent research by various authors to explore correlates of the love styles.

Gender Differences in Love Styles. Hendrick and Hendrick (1986) reported gender differences in the experiences of love styles. Specifically, males were significantly more ludic than females, whereas females were more storgic, pragmatic, and manic. Furthermore, Hendrick and Hendrick (1986) found that respondents who reported never having been in love endorsed Eros and Agape the least, but those who had been in love twice or more endorsed these love styles the most. Differences in experiences of Ludus were also found. Persons who reported having been in love three or more times were the most ludic, followed by those who had never been in love. However, respondents who had been in love once were *least* endorsing of Ludus.

The research of Bailey, Hendrick, and Hendrick (1987) also addressed the issue of consistent gender differences in experiences of Lee's (1976) love styles. In their research, Bailey, et al. (1987) explored the possibility that gender role orientation might be related to differences in love attitudes. Specifically, these authors correlated scores on the *Bem Sex Role Inventory* (Bem, 1974), which contains stereotypical masculine and feminine items and gender neutral items, with those on the LAS (Hendrick & Hendrick, 1986). Results indicated that masculinity was positively related to Ludus and negatively to Mania; femininity was inversely correlated with Ludus, but positively related to Mania. Furthermore, femininity was related positively to Eros, Storge, and Pragma. These results were consistent with earlier research (Hendrick & Hendrick, 1986).

Correlates of the Love Styles. Hendrick, Hendrick, and Adler (1988) later explored the relationship between measures of self-esteem and relational satisfaction with scores on the LAS. The researchers found that relationship satisfaction was strongly and positively correlated with Eros, whereas it was strongly and negatively correlated with Ludus. Agape was moderately correlated with relational satisfaction for women and with self-esteem for men (Hendrick, et al., 1988). Additionally, Hendrick, et al. (1988) examined predictors of satisfaction, and results indicated that for men, Eros and self-esteem were significant predictors of relationship satisfaction, whereas Ludus was a negative predictor of relationship satisfaction. Storge (positively) and Ludus (negatively) predicted satisfaction for women.

Hendrick, et al. also explored the degree of similarity between partners' love attitudes. Partners' responses on four of the six love scales (Eros, Storge, Mania, & Agape) were significantly related to each other (Hendrick, et al., 1988). In addition, the researchers explored the relationship between ratings of self-satisfaction (self-feelings and present happiness) and love styles and found that for both genders, Eros (positively) and Ludus (negatively) were related to self-satisfaction. However, Agape was related to self-satisfaction only for women. In addition, within couples, men's love styles correlated with women's satisfaction and women's love styles correlated with men's satisfaction. Specifically, results indicated that women's scores on both Agape and Eros correlated strongly with men's relational satisfaction, whereas men's Agape and Eros correlated only moderately with women's satisfaction scores. Thus, Hendrick, et al. (1988)

suggested that women's love orientations may have particular importance for their partners' relationship satisfaction.

In another study, Hendrick and Hendrick (1987) explored attitudes toward love and sex. The Sexual Attitudes Scale, developed by Hendrick and Hendrick (1987), measures four attitudes about sexuality. These attitudes include Communion (idealistic sexuality), Permissiveness (casual, open sexuality), Sexual Practices (responsible sexuality), and Instrumentality (biological sexuality). The researchers reported that Eros and Agape were significantly related to Communion, whereas Agape was negatively related to Permissiveness. These correlations, according to Hendrick and Hendrick (1987), were consistent with Lee's (1976) description of the love styles; that is, both agapic and erotic lovers are somewhat idealistic and tend to view sex as an intimate experience which is an expression of love. Furthermore, Ludus was related to Permissiveness and Instrumentality, and the authors noted that this finding was reflective of ludic lovers' utilitarian approach to love, preference for nonmonogamous relationships, and avoidance of commitment (Hendrick & Hendrick, 1987).

Hendrick and Hendrick (1987) studied the link between love attitudes and religious beliefs with the rationale that, at least from a clinical point of view, love and religion often influence individual and marital issues and conflict. Findings indicated that participants who reported being very religious also reported experiencing greater levels of Storge, Pragma, and Agape; conversely, those who reported being the least religious more strongly endorsed items associated with

Ludus (Hendrick & Hendrick, 1987). Thus, it appeared that religious people tended to endorse the "dependable" and stable love styles compared to less religious participants who identified with the concept of game-playing love relationships.

In his research, Woll (1989) examined Lee's (1976) love styles as they related to personality in general. Specifically, Woll (1989) reasoned that the erotic lover's enjoyment of intense emotions and emphasis on physical attraction, and the relative insignificance of such characteristics to the pragmatic or storgic lover, may suggest a difference in the "sensation-seeking motive" (Zuckerman, 1979) within these love styles. For Woll (1989), it was logical to assert that agapic lovers have specific needs, as Murray (1938) described, such as a high need to nurture, whereas the ludic lover may possess a need for excitement.

Woll's (1989) research revealed the following personality correlates of love styles: persons scoring higher on Eros appeared to be more emotionally sensitive, ambitious, aggressive, and persistent. Scores on Mania were related to aggression, emotional sensitivity, and neuroticism, whereas higher Ludus scores appeared to be related to disinhibition, playfulness, aggressiveness, and sociability. Furthermore, Agape was related to need for nurturance and emotional sensitivity, and Pragma was related to need for physical and logical order, as well as to a reluctance to seek out new experiences. Those scoring higher on Pragma also appeared to be more sensitive to and more dependent on others. Additionally, those who more strongly endorsed Storge appeared to possess a higher need for nurturance and social recognition (Woll, 1989).

Leak and Gardner (1990) addressed the relationship between levels of social interest (e.g., concern with problems in the outside world) and love style orientation. Leak and Gardner (1990) noted that according to Adlerian theory, interpersonal relationships (e.g., love and friendship) are fundamental life tasks which are social in nature. Furthermore, as Adlerian theory states, high levels of social interest are required to solve these problems. Applying this theory to their research, Leak and Gardner (1990) asserted that higher levels of social interest should be related to greater experiences of mature love, such as Agape or Storge. Results indicated that higher levels of social interest were related positively to scores for Storge and negatively to scores for Ludus. According to these authors, findings were consistent with Lee's (1988) notion that storgic lovers place emphasis on friendship, family, and community, perhaps because these persons are usually raised in larger families and stable communities. As Lee (1988) stated, social issues tend to have more salience for individuals living in such communities.

The research of Hall, Hendrick, and Hendrick (1991) explored the relationship between love styles and individuals' personal construct systems of their romantic relationships. Hall, et al. evaluated four construct systems: cognitive complexity (an understanding of the multidimensionality of behavior), threat (anticipation of comprehensive changes within oneself) perceptual shift (temporary change in interpretation of one's environment) and actualization (no differentiation between one's ideal and current relationship). The researchers reported that men who more strongly endorsed Eros, Storge, and Agape reported perceiving their current

relationships as similar to their ideal relationships, as indicated by strong positive correlations with actualization and the latter love styles. Furthermore, men who reported experiencing less threat were more pragmatic in their love style. Additionally, men who were more manic were more likely to experience a shift in perceptions of their partners; by contrast, men who scored higher on Eros were less likely to experience perceptual shift. For women, higher scores on Agape were related to less perceptual shift whereas higher scores on Pragma were related to actualization; furthermore, more cognitive complexity was associated with storgic love (Hall, et al., 1991).

These researchers indicated that for men, passionate love was related to perceptions of one's relationship as ideal, greater cognitive complexity, and less perceptual shift. Such findings, according to Hall, et al., were consistent with Lee's (1976) notion that erotic lovers find a great deal of satisfaction and comfort with the emotions involved in a passionate relationship; hence, these lovers tend to regard their relationship as ideal and are not likely to change their perceptions of their partner despite conflict which may arise. By contrast, as these authors suggested, manic lovers often change their perceptions of their partners. These lovers typically are not tolerant of negative affect from their partners and usually react with greater emotional distance from their partner (Hall, et al., 1991). As this research indicated, greater perceptual shift was indeed related to Ludus.

An interesting study by Raciti and Hendrick (1992) explored interpersonal and relational aspects of women with eating disorders. Results suggested that drive for thinness, bulimia, greater levels of interpersonal distrust, and lower self-

esteem were positively related to higher scores on Mania. Drive for thinness was positively related to Mania but negatively to Storge. By contrast, greater distrust and lower self-esteem were negatively related to Eros and Agape. These results were consistent with Lee's (1977) theory that, in general, those who endorse passionate and altruistic love (as opposed to manic, dependent love) have higher self-esteem and perceive others and potential partners as trustworthy. Raciti and Hendrick (1992) asserted that causal links were not examined, and it was not determined whether women with relationship problems were at a higher risk for eating disorder characteristics, or if the converse were true. However, as these authors noted, it was clear that women who reported dissatisfaction with their physical appearance were different from women who reported satisfaction with their physical appearance on a number of relationship and eating dimensions (Raciti & Hendrick, 1992).

A recent study by Hendrick and Hendrick (1993) examined college students' narrative accounts of their romantic love relationships. When coded for love themes based on Lee's typology, the most frequently reported theme was Storge (66 percent), followed by Eros (34 percent) and Pragma (17 percent). Furthermore, when asked to describe their closest friendship, approximately 45 percent identified their romantic partner as their closest friend. Also, there was good correspondence between students' scores on the LAS and their accounts of their love relationships. According to Hendrick and Hendrick (1993), the findings seemed to suggest that there is a strong friendship component to love. Although many theorists have differentiated friendship from love or liking from

loving (e.g., Davis & Todd, 1982; Rubin, 1970), few studies have addressed friendship/companionship as a *component* of romantic love (Hendrick & Hendrick, 1993). Moreover, as the researchers argued, the frequently cited passionate versus companionate love distinction, (Walster and Walster, 1978) and particularly the argument that the former evolves into the latter, may be a more accurate portrayal of relationships in the 1970's than of current ones. Evolving sex roles, growing concern with sexually transmitted diseases, and high rates of divorce have significantly impacted romantic relationships, according to these researchers. Thus, Hendrick and Hendrick (1993) argued, according to their data, the sequencing of passionate and companionate love may have changed somewhat. Many couples' reports of a companionate/friendship component in the early stages of their relationship suggested that passion and companionship may not be consecutive in romantic relationships, but rather concurrent (Hendrick & Hendrick, 1993).

Summary

Comparisons between love styles and various other measures (e.g., relational, personality) have provided support for Lee's (1976) conceptualizations concerning a number of interpersonal constructs. Some of these variables have included relational satisfaction, sexual attitudes, self-esteem, emotional sensitivity, and interpersonal distrust. Eros, for example, is related to higher self-esteem, more idealistic sexual attitudes, and less interpersonal distrust, whereas Mania is inversely correlated with the same variables. Furthermore, Agape is more strongly and positively correlated with greater emotional sensitivity and

relational satisfaction. By contrast, Ludus is typically inversely related to such variables. The correlations of Storge and Pragma, with, for example, sexual attitudes and relational satisfaction have not been reliable. However, respondents who have reported greater religious attitudes have more strongly endorsed these kinds of love.

The Present Study

In the present study, comparisons were made between the LAS and other related measures, such as commitment, trust, life and relational satisfaction, guilt, and loneliness in order to address two issues. First, the construct of companionate love and the issue of its ostensible divergence from passionate love have not been extensively investigated; hence, the utility of the distinction was addressed using three subscales (i.e., Eros, Ludus, Mania) as surrogate measures for passionate love and the remaining subscales (i.e., Storge, Pragma, Agape) as surrogate measures for companionate love. Second, because the comparison scales (i.e., relational measures) are representative of the various characteristics of love styles as articulated by Lee, such interpersonal constructs appeared to be useful in exploring more fully the nature of the love styles.

III. Method

Procedure and Participants

Participants were 276 (64 males, 191 females) undergraduates enrolled in psychology classes at the University of Tennessee, Knoxville. The students were predominantly Caucasian (78.3%), unmarried (69.8%), had completed some college (62.3%), reported current involvement in a romantic relationship (58.7%), and were seriously dating (35%). The mean age was 21.9; the mean length of relationship was 32 months.

Respondents received nominal course credit for completing questionnaires out of class, and were informed that they would be participating in a study of personality and relationships. Questionnaires consisted of biographical questions (e.g., gender, age, romantic involvement), and measures of love, trust, loneliness, relationship satisfaction and commitment, life satisfaction, and trait guilt. However, because the data used for the present study were part of a larger study, participants completed the measure of love attitudes and comparison scales along with other scales and items not included in the present study. Additionally, due to missing data and different combinations of questionnaires, sample sizes varied.

Respondents were presented with and asked to sign an informed consent which explained to the participants that their responses would be kept completely confidential, and that completion of the questionnaires was voluntary. Also, participants were assured they would not be penalized for terminating their participation in the study.

Measures

Participants completed the following measures: the Love Attitudes Scale (LAS) (Hendrick & Hendrick, 1986); the UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980); trait guilt items from the Guilt Inventory (Kugler & Jones, 1992); the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985); the Trust Inventory (Couch, 1994); the satisfaction items from the Marital Satisfaction and Commitment Scale (Jones, Adams, Monroe, & Berry, 1994), and the Marital Commitment Inventory (Adams, 1994). However, because the current sample was comprised primarily of unmarried couples, the names of some of the subscales in comparison measures were reworded to reflect this sample.

Love Attitudes Scale. Hendrick & Hendrick (1986) developed the Love Attitudes Scale (LAS) to measure the six love styles as articulated by Lee (1976). Various loving styles, according to Lee (1976), are analogous to different colors; that is, love is experienced and defined individually much as colors are observed in the natural world. In particular, Lee (1973) refers to *Eros* as romantic or passionate love; *Ludus* as game-playing love; *Storge* as friendship love; *Pragma* as practical, "shopping-list" love; *Agape* as selfless love; and *Mania* as possessive, dependent love. The LAS is a 42-item measure with 7 items assessing each of the 6 love styles. Answers to items are given using a Likert-type response format (*Strongly Agree* [5], *Strongly Disagree* [1]); consequently, higher scores indicate an endorsement of a love style as it is measured by a particular item.

Hendrick and Hendrick (1986) reported that the content of the scale items is consistent with Lee's (1976) original conceptualization of the love styles. Specifically, Eros refers to strong initial attraction, physical preferences for mate, intense emotions, and a high level of commitment. By contrast, Ludus refers to a game-playing orientation to love in which deception, manipulation, and lack of commitment are perceived by the Ludic lover as simply part of the game of love. The LAS also measures Storge, a style of loving which emphasizes the role of friendship in love. These lovers often conceptualize love as "evolutionary" and prefer endurance to passion. Items which pertain to Mania, or obsessive love, reflect the idea that love stems from uncertainty of self and dissatisfaction with one's life. The least commonly found type of love, as Lee (1976) asserted, is Agape—an all-giving, selfless kind of love. This kind of lover considers it his/her duty to love, even if no loving feelings are present.

Lee (1976) asserted that Eros, Storge, and Ludus, which he called primary styles of loving, could conceptually be combined to form three secondary styles, Pragma, Agape, and Mania. For example, a combination of Eros and Ludus would yield Mania, and a combination of Storge and Ludus would result in Pragma (Lee, 1976). Lee (1976) purported that when any two primary love styles are combined, some of the qualities of each primary style are lost while other new qualities emerge. Specifically, although Pragma reflects Storge's emphasis on selecting a mate who shares similar interests as well as Ludus's manipulative confidence, Pragma is nevertheless unique in its emphasis on practicality.

According to Hendrick and Hendrick (1986), the structural model for the six love scales clearly emerged from factor analytic research. In the analyses, the 42 items were factored, and six factors were extracted and rotated. The seven items within the factors showed substantial loadings; specifically, all items for both Ludus and Pragma yielded factor loadings which were not less than .50. For two others (Agape and Mania), only one of the seven items had a loading less than .50 on the correct factor. For Eros, one factor loading (.37) was less than .50, and the remaining item loadings ranged from .53 to .78. Items for Storge had three factor loadings less than .50, and the others ranged from .56 to .80 (Hendrick & Hendrick, 1986). Furthermore, between-factor analyses revealed that whereas the seven critical items which define a particular scale loaded strongly on that factor, the remaining 35 variables were low on that factor, demonstrating discriminant validity of the items.

The love scales were also analyzed for reliability. All of the alpha coefficients were .70 and greater, with the exception of Storge, for which Hendrick and Hendrick (1986) reported an alpha of .62. Test-retest correlations have ranged from .60 to .78, and are as follows: .72 (Ludus), .72 (Storge), .78 (Pragma), .75 (Mania), .73 (Agape), and .60 (Eros). Mean interitem correlations were reported by Hendrick and Hendrick (1986) as follows: .29 (Ludus); .24 (Storge); .30 (Pragma); .27 (Mania); .41 (Agape); and .26 (Eros). These results suggest that the instrument meets or exceeds conventional standards of consistency and stability.

Hendrick and Hendrick (1986) reported that the six love scales appear to possess content validity and are sound measurement scales. Furthermore, according to these authors, items which measure Mania, for example, reflect a kind of "symptom love" based on uncertainty of self and one's lover, and items which measure Agape seem to refer to a volitional commitment to one's partner and an idealistic view of love.

Several authors have addressed the validity of the LAS by exploring personality and interpersonal correlates of the love styles. The research of Leak and Gardner (1990), for example, explored the relationship of levels of social interest (concern with problems in the outside world and for interpersonal relationships) to love styles. These authors reported a strong positive relationship between social interest and greater endorsement of Storge, a finding consistent with Lee's (1976) assertion that Storgic lovers place emphasis on the quality of their relationships.

Woll (1989) explored the personality correlates of Lee's love styles and found support for Lee's (1976) contention that, for example, Manic lovers tend to be more aggressive and neurotic. Similarly, Hall, Hendrick, and Hendrick (1991) have correlated the love styles with personal construct systems, and results were also consistent with Lee's (1976) theoretical conceptualizations. Thus, there is substantial support for the validity of the LAS interpretations.

UCLA Loneliness Scale. The UCLA Loneliness Scale (ULS) (Russell, Peplau, & Cutrona, 1980) is the most widely used measure of loneliness. The 20-item instrument measures subjective feelings of loneliness. In the measure,

items do not refer specifically to loneliness; rather, they measure perceived isolation from others and those experiences which are thought to be related to loneliness (Hartshorne, 1993). Moreover, the scale measures the discrepancy between perceived and idealized relationships.

The UCLA Loneliness Scale uses a 4-point forced-choice Likert-type response format (never [1] to often [4]) and yields a single score. Of the 20 items, ten are worded positively (e.g., "I do not feel alone"), and the remaining ten are worded negatively (e.g., "My interests and ideas are not shared by those around me"; Russell, et al., 1980).

The scale has been factor analyzed in order to establish its unidimensionality. Hartshorne's (1993) confirmatory factor analyses yielded high alpha coefficients, supporting the unidimensionality of the instrument. Russell (1982) reported a coefficient alpha of .96, and subsequent research (e.g., Cuffel & Akamatsu, 1989; Knight, Chisholm, Marsh, & Godfrey, 1988) reported coefficient alphas at .90 or above. Test-retest reliability analyses yielded a correlation of .85; split-half reliability was reported as .79 (Hartshorne, 1993).

The measure was examined by Russell (1982) in relation to various validity criteria. Specifically, the correlation between a self-report question concerning current loneliness and the loneliness scale score was significant ($r=.79$, $p<.001$). Furthermore, Jones (1977) reported that scores on the ULS correlated .43 with a measure of anxiety and .38 with a measure of depression. The measure has also demonstrated concurrent validity. The correlation between an item not on the

ULS, (i.e., "I am often lonely") and the total score on the ULS was .59 (Hartshorne, 1993).

Trait Guilt (Guilt Inventory). Trait guilt, defined as a continuing sense of guilt or a tendency to feel guilty, is one of three subscales on the Guilt Inventory (Kugler & Jones, 1992). On the 20-item measure, responses to items are rendered on a 5-point scale (Strongly Agree [5], Strongly Disagree [1]). Approximately one-half of the items are worded to reflect a lower sense of guilt.

The scale appears to be internally consistent. Kugler and Jones (1992) reported alpha coefficients which ranged from .81 to .89. Furthermore, these authors reported mean interitem correlations as ranging from .22 to .29. Ten-week test-retest correlation for trait guilt was .72; a 36-week test-retest correlation was .75 (Kugler & Jones, 1992). Thus, trait guilt appears to measure enduring characteristics.

The Guilt Inventory has correlated highly with other measures of guilt, such as the three Mosher (1968) Guilt Scales—Sex Guilt, Hostility Guilt, and Guilty Conscience, suggesting concurrent validity. The inventory has also demonstrated convergent validity. Specifically, Jones and Kugler (1993) reported that trait guilt was positively related to a number of self-report adjective descriptions, including *lonely*, *depressed*, *distressed*. Furthermore, these authors found that persons with high guilt scores reported dissatisfaction with friendships as well as other interpersonal settings, such as work or school (Jones & Kugler, 1993).

Satisfaction with Life Scale. The Satisfaction with Life Scale (SWLS, Diener, Emmons, Larsen, & Griffin, 1985) was developed to measure life

satisfaction as a cognitive-judgmental process. The measure contains five items which ask the respondent to make an overall judgement of his or her life as indicative of overall life satisfaction. Responses to items are rendered on a 7-point Likert-type scale (Strongly Disagree [1]; Strongly Agree [7]).

The scale yielded a two-month test-retest correlation of .82, and coefficient alpha was .87 (Diener, et al., 1985). Item-total correlations ranged from .57 to .75. The scale appears to be moderately to highly correlated with other measures of subjective well-being; specifically, the measure correlated .66 with Cantril's (1965) Self-Anchoring Ladder. Furthermore, the SWLS appears to be correlated with specific personality characteristics, such as self-esteem ($r = .54$) and emotionality ($r = -.25$) (Diener, et. al, 1985).

The Satisfaction Scale. The Satisfaction Scale of the Marital Satisfaction and Commitment Scale (MSCS) is a 15-item measure of the level of satisfaction with one's marital relationship and is a subscale on the Marital Satisfaction and Commitment Scale (Jones, Adams, Monroe, & Berry, 1994). The inventory was designed to assess satisfaction with one's marriage, but because most participants in the present study were unmarried, references to one's spouse and marital relationship were changed to "partner" or "romantic relationship". The satisfaction scale has demonstrated validity in that it differentiates, for example, between married and divorced couples. Furthermore, the scale has shown adequate reliabilities, with alphas reported between .75 and .80 and test-retest correlations ranging above .85.

The Marital Commitment Inventory. The Marital Commitment Inventory (MCI; Adams, 1994) is a 45-item measure consisting of three subscales-- Commitment to Spouse, Commitment to Marriage, and Barriers with 15 items measuring each dimension. The inventory was designed to measure dimensions of commitment in married couples; however, the majority of the participants in the present study were unmarried. Thus, respondents were asked to complete the measure based on their level of commitment to their "romantic partner".

The measure has demonstrated adequate reliability; specifically, alpha coefficients for each of the subscales ranged from .86 to .91, and mean interitem correlations ranged from .28 to .40. Moreover, these reliabilities were consistent across samples. The three subscales have demonstrated validity in that they differentiate satisfied from unsatisfied spouses. Furthermore, the three subscales have demonstrated concurrent validity, as they were significantly related to other theoretically relevant variables and with extant measures of commitment.

The Trust Inventory. The Trust Inventory (Couch, 1994) consists of three subscales: Partner Trust, Network Trust, and Generalized Trust. Hence, the measure yields three scores. Partner Trust is defined as trust in a romantic partner or in one's romantic relationship; Network Trust is defined as feelings of confidence or security one has in one's relationships with friends and family; and Generalized Trust refers to the propensity to attribute positive characteristics to other people and to human nature.

Estimates of internal reliability for the current version of the Trust Inventory meet acceptable standards of measurement. Coefficient alphas ranged from .87

to .92, and the mean inter-item correlations for the scales ranged from .33 to .40. The Partner Trust scale consists of 20 items, and the Network and Generalized Trust scales consist of 10 and 20 items, respectively. A nine-week test-retest correlation of the scales suggested that the measure is temporally stable (Partner Trust, $r = .82$; Network Trust, $r = .74$; & Generalized Trust, $r = .80$). Comparisons of the Trust Inventory with extant measures of trust and other measures provided evidence of the concurrent and discriminant validity of scale interpretations (Couch & Jones, 1995).

IV. Results

Primary Analyses

Correlates of the Love Styles. Correlations among love styles and related measures were computed for the genders combined and separately. Results are shown in Table 1 for the combined analyses. Results indicated that participants who scored higher on Eros also reported being more committed to their partner, more satisfied with their relationship, and having greater trust in their relational partner. To a lesser extent, higher scores on Eros were also related to lower scores on loneliness. By contrast, respondents with higher scores on the Ludus scale reported less commitment to their partner. Furthermore, modest inverse correlations were observed between scores for Ludus and commitment to and satisfaction with one's relationship. Additionally, higher scores for ludic love were associated with lower scores on partner and network (friends and family) trust; scores for this love style were modestly correlated with scores for loneliness and trait guilt. Higher scores on manic love were related to greater experiences of trait guilt and greater barriers to the dissolution of one's current romantic relationship.

For companionate love styles, results indicated that scores for Pragma were modestly correlated with scores for barriers, whereas all other comparisons with this love styles were not significantly different from zero. By contrast, respondents' scores for Storge were modestly and directly correlated with generalized trust, relationship satisfaction, commitment to one's partner, and

Table 1

Correlations Among Love Styles and Comparison Measures

	Eros	Ludus	Mania	Storge	Pragma	Agape
Commitment						
Partner	.32**	-.41**	.07	.17*	.06	.48**
Relationship	.13	-.19*	.16	.07	.18	.43**
Barrier	-.00	-.09	.25**	-.05	.18*	.35**
Trust						
Partner	.34**	-.35**	-.20**	.16*	-.07	.29**
Network	.13	-.26**	-.21*	.08	-.10	.07
General	.09	-.21	-.10	.19**	.03	.06
Satisfaction						
Relational	.31**	-.20*	-.08	.17*	.03	.22**
Life	.17*	-.11	-.10	.07	.09	.22**
Loneliness	-.21**	.17*	.17*	.17*	.00	-.03
Guilt	-.06	.17*	.24**	.24**	-.05	.05

Notes. Eros, Ludus, Mania, Storge, Pragma, Agape = Love Attitudes Scale (Hendrick & Hendrick, 1986); Partner, Relationship, Barrier = Marital Commitment Inventory (Adams, 1994); Partner, Network, General = The Trust Inventory (Couch, 1994); Relational = Satisfaction scale of Marital Satisfaction

Table 1 (continued)

and Commitment Scale (Jones, et al., 1994); Life = Satisfaction With Life Scale (Diener, et al., 1985); Loneliness = UCLA Loneliness Scale (Russell, et al., 1980); Guilt = Trait Guilt scale of Guilt Inventory (Kugler & Jones, 1992); Ns = 121-215. Ns vary due to missing data and different combinations of questionnaires; ** $p < .01$, * $p < .05$.

partner trust. Scores for this love style were inversely related to scores on the UCLA Loneliness Scale. Individuals who endorsed Agape items more strongly reported greater levels of relationship satisfaction and greater trust for their romantic partner. In addition, respondents yielding higher scorers on Agape also reported being more highly committed to their partner and to their relationship, and indicated greater barriers to relationship dissolution.

Thus, with only a few exceptions these results did not reflect a pattern of correlations suggesting divergence between these surrogate measures of passionate versus companionate love.

Gender Differences. Because gender differences have been reported in experiences of the love styles (e.g., Hendrick & Hendrick, 1986), correlations among love styles and related measures were computed separately for men and women, and are shown in Tables 2 and 3, respectively. As may be seen in Table 2, men who more strongly endorsed erotic love reported greater satisfaction with their relationship and greater trust in their romantic partner. Furthermore, men scoring higher on Ludus reported less commitment to their relational partner and to their relationship. Additionally, men who yielded higher scores on manic love reported experiencing greater barriers to relationship dissolution and less trust in their family and friends. For companionate love styles, results indicated that men who more strongly endorsed Pragma reported a greater sense of guilt. In addition, men scoring higher on Pragma also reported less satisfaction with their life and less generalized trust. Men with higher scores for Agape reported greater levels of commitment to their relationship and greater barriers to terminating

Table 2

Correlations Among Love Styles and Comparison Measures for Men

	Eros	Ludus	Mania	Storge	Pragma	Agape
Commitment						
Partner	.07	-.46*	-.02	.09	-.31	.39
Relationship	.16	-.42*	.28	-.01	-.12	.71**
Barrier	-.05	-.23	.45*	-.09	-.09	.60**
Trust						
Partner	.47**	-.06	-.18	.05	-.09	.24
Network	.21	-.14	-.29*	.10	-.27	.10
General	.13	-.17	-.10	.22	-.31*	.24
Satisfaction						
Relational	.48*	-.25	-.20	-.03	-.03	.34
Life	.35	-.42	-.08	-.33	-.50	.41
Loneliness	-.21	.09	.30	-.16	.15	-.18
Guilt	-.28	.22	.05	.35	.43*	-.17

Notes. Eros, Ludus, Mania, Storge, Pragma, & Agape = Love Attitudes Scale (Hendrick & Hendrick, 1986); Partner, Relationship, Barrier = Marital Commitment Inventory (Adams, 1994); Partner, Network, General = The Trust Inventory (Couch, 1994); Relational = Satisfaction scale of Marital Satisfaction

Table 2 (continued)

and Commitment Scale (Jones, et al., 1994); Life = Satisfaction With Life Scale (Diener, et al., 1985); Loneliness = UCLA Loneliness Scale (Russell, et al., 1980); Guilt = Trait Guilt subscale of the Guilt Inventory (Kugler & Jones, 1992); $N_s = 21-47$; N_s vary due to different combinations of questionnaires and missing data; ** $p < .01$, * $p < .05$.

their relationship.

As shown in Table 3, among women, scores on Eros were positively correlated with commitment to one's partner, relationship satisfaction, and partner trust. By contrast, women scoring higher on Ludus reported less commitment to their partner and yielded lower scores for partner trust and network trust. Women with higher scores for Mania yielded higher scores for barriers to relationship termination and trait guilt. For companionate love styles, significant correlations were observed between scores for Storge and relational satisfaction, and to a lesser extent, higher scores for this love style were related to greater partner trust. Female participants scoring higher on Pragma also reported experiencing greater barriers to dissolution of their relationship. However, among women, higher scores on Pragma were also associated with being more strongly committed to the relationship. Those yielding higher scores on Agape reported higher levels of commitment to their partner and to their relationship, but they also reported greater barriers to ending their relationship. Among women, Agape was associated with trust in one's partner.

Secondary Analyses

Factor Analysis. The 42 items of the Love Attitudes Scale were subjected to a factor analysis. The purpose of this analysis was to determine whether the structure of love attitudes as reported in previous research (e.g., Hendrick & Hendrick, 1986) was reflected in these data. Six factors were extracted using varimax rotation. Before rotation, the percent of total variance accounted for by each of the factors was as follows: Agape (15), Pragma (8.6), Eros (8.1), Mania

Table 3

Correlations Among Love Styles and Comparison Measures for Women

	Eros	Ludus	Mania	Storge	Pragma	Agape
Commitment						
Partner	.41**	-.40**	.07	.18	.18	.59**
Relationship	.19	-.15	.17	.11	.30**	.40**
Barrier	.06	.10	.26**	-.02	.27**	.31**
Trust						
Partner	.30**	-.43**	-.22**	.18*	-.06	.35**
Network	.11	-.33**	-.19*	.06	-.07	.10
General	.06	-.21**	-.09	.16	.11	.07
Satisfaction						
Relational	.25**	-.17	-.09	.22*	.01	.24*
Life	.13	-.06	-.13	.11	.20*	.07
Loneliness	-.19	.14	.21	-.12	-.03	.01
Guilt	-.00	.18	.28**	-.14	-.03	.15

Notes. Eros, Ludus, Mania, Storge, Pragma, & Agape = Love Attitudes Scale (Hendrick & Hendrick, 1986); Partner, Relationship, Barrier = Marital Commitment Inventory (Adams, 1994); Partner, Network, General = The Trust Inventory (Couch, 1994); Relational = Satisfaction scale of Marital Satisfaction

Table 3 (continued)

and Commitment Scale (Jones, et al., 1994); Life = Satisfaction With Life Scale (Diener, et al., 1985); Loneliness = UCLA Loneliness Scale (Russell, et al., 1980); Guilt = Trait Guilt subscale of the Guilt Inventory (Kugler & Jones, 1992); $N_s = 88-155$. N_s vary due to different combinations of questionnaires and missing data; ** $p < .01$, * $p < .05$.

Mania (6.2), Storge (4.6), and Ludus (4.0). Agape was the first factor extracted and, by definition, it accounted for the most variance. All six factors combined accounted for 46.5% of the total variance.

As may be seen in Table 4, the factor loadings were substantial. For Eros and Ludus, five of the seven items for each scale loaded strongly on the correct factors. For Mania, all items loaded correctly on that factor, and only one item had a loading less than .50. Storge had three such items, but all items loaded on the correct factor. For Pragma, all items loaded strongly on that factor, and for Agape, all items loaded on the correct factor, and five of these items had loadings above .50. Also, one item for Agape loaded significantly on the Eros factor.

Psychometric Properties of the LAS. The love style scales were subjected to a reliability analysis to establish the operating characteristics of the measure. As may be seen in Table 5, alpha coefficients were substantial, ranging from .72 to .83. Means were also calculated for the LAS and results indicated that respondents most strongly endorsed items on the Eros and Agape scales. Participants were least strongly endorsing of items on the Ludus scale. These results are consistent with previous research of Hendrick and Hendrick (1986, 1993). Also, the current sample yielded lower scores for Pragma than had been observed in previous research.

To assess the degree of love scale independence, sum scores were computed for each of the love scales and were intercorrelated. Results are

Table 4

Factor Loadings for the Love Attitudes Scale

		Factor Loadings					
Item Content		E	L	M	S	P	A
<i>Eros</i>	1. Attracted immediately	.26	.09	-.01	-.09	-.00	.10
	2. Physical chemistry	.74	-.09	.04	-.04	-.10	-.03
	3. Lovemaking intense	.68	.05	.16	-.02	-.07	.10
	4. Meant for each other	.68	-.13	.03	.08	.02	.24
	5. Involved quickly	.14	.07	.06	-.19	.00	.06
	6. Understand each other	.60	.04	-.18	.20	.08	.13
	7. Ideal physical appearance	.56	-.27	.13	-.10	.02	.21
<i>Ludus</i>	8. Commitment uncertain	-.30	.50	.15	.01	.03	-.14
	9. Don't disclose much	-.05	.74	.02	-.21	.05	-.17
	10. Many lovers	-.03	.75	-.04	-.03	.08	.01
	11. Quickly over love affairs	-.11	.24	-.16	-.05	.08	-.11
	12. Keep secrets from lover	.02	.63	.17	-.01	.03	-.01
	13. Dislike dependency	-.26	.25	-.04	.09	.17	-.20
	14. Love is a game	-.26	.52	-.02	.01	.07	-.02

Table 4 (continued)

		Factor Loadings					
	Item Content	E	L	M	S	P	A
<i>Mania</i>	29. Stomach hurts after fight	.07	-.05	.62	-.08	.03	-.01
	30. Suicidal if we break up	-.26	.15	.32	-.07	-.11	.11
	31. Excited about love	-.10	-.15	.54	.21	-.07	.23
	32. Sick without attention	-.03	.07	.70	-.06	.08	.23
	33. Trouble concentrating	-.01	.02	.65	.10	.02	.19
	34. Suspect cheating	.16	.12	.53	-.22	.17	.15
	35. Do anything for attention	.02	.14	.67	-.10	-.02	.02
<i>Storge</i>	15. Love begins with friendship	-.06	.04	-.02	.20	.02	.04
	16. Love is caring	-.01	-.04	-.01	.36	.06	.12
	17. Friends with lover	.26	-.16	-.06	.25	.08	.10
	18. Long friendship important	-.02	.05	-.10	.78	.09	-.01
	19. Friendship became love	.10	-.14	.06	.74	.07	.09
	20. Love not an emotion	.06	-.03	.05	.58	.02	-.02
	21. Good friendship is love	-.02	-.11	-.00	.83	.03	.05
<i>Pragma</i>	22. Partner's goals important	.07	.06	-.04	.04	.78	-.01
	23. Plan before choosing mate	.09	.15	-.16	-.00	.72	.03
	24. Mate's background important	-.03	-.01	-.03	.10	.50	.11

Table 4 (continued)

		Factor Loadings					
Item Content		E	L	M	S	P	A
<i>Pragma</i>	25. Reflects on my family	-.11	-.02	.19	.08	.59	-.07
	26. Choose good parent	-.08	-.17	.05	.07	.67	.03
	27. Reflects on my career	-.04	.08	.14	-.00	.66	-.07
	28. Compatible heredity	-.05	.18	.04	.08	.60	-.02
<i>Agape</i>	36. Help lover always	.12	-.15	.24	.06	-.06	.17
	37. Suffer for lover	.05	-.08	.11	.07	.01	.75
	38. Lover's happiness first	.04	-.02	.11	.01	-.02	.80
	39. Sacrifice for lover	.23	-.12	.06	-.10	-.06	.80
	40. Belongings are lovers'	.39	-.12	-.07	.02	.01	.58
	41. Love unconditionally	.39	-.12	-.07	.02	.01	.37
	42. Endure all for lover	.28	-.10	.05	.02	-.06	.71

Notes: E L M S P A = Eros, Ludus, Mania, Storge, Pragma, & Agape; LAS
(Hendrick & Hendrick, 1986).

Table 5

Operating Characteristics of Love Attitudes Scale

Variable	# Items	Mean	SD	Alpha	Mean Inter-item r
Eros	7	26.9	1.0	.72	.27
Ludus	7	16.2	1.2	.75	.30
Mania	7	21.7	1.1	.74	.29
Storge	7	25.2	1.1	.72	.27
Pragma	7	21.3	1.1	.80	.36
Agape	7	26.2	.96	.83	.40

Notes. Eros, Ludus, Mania, Storge, Pragma, & Agape = Love Attitudes Scale (Hendrick & Hendrick, 1986).

shown in Table 6. Combined scores indicated that Eros was significantly and inversely correlated with Ludus and positively correlated with Agape. Ludus and Agape were negatively correlated, whereas Mania and Agape were positively correlated. Thus, contrary to predictions, neither the measures of passionate love nor those of companionate love were strongly interrelated. Furthermore, Agape was strongly and positively related to two of the passionate love styles (Eros, Mania). Hence, the distinction between the two kinds of love did not emerge clearly from these analyses.

Correlations among the love scale scores were also computed separately for men and women, and results are shown in Tables 7 and 8, respectively. Results indicated that for men, significant positive correlations for Eros and Agape were again observed. Agape was also significantly related to Mania, and inversely related to Ludus. Additionally, Pragma and Storge were significantly correlated. Results were similar for women, as Agape was significantly related to Eros and Mania, and inversely related to Ludus. Furthermore, Ludus was inversely correlated with Eros but for female participants only.

Gender Differences in Love Style Scores. To explore mean differences between men and women in love styles, t-tests were performed. Results indicated that men scored significantly higher on Ludus ($m = 17.9$, $s.d. = 5.5$) than women ($m = 15.7$, $s.d. = 5.2$), and this difference was statistically significant, $t(254)=2.84$, $p<.01$. No significant differences were observed between men and women for the remaining love styles.

Table 6

Intercorrelations Among Love Scale Sum Scores

Scale	Ludus	Mania	Storge	Pragma	Agape
Eros	-.26**	.07	.05	-.01	.40**
Ludus	---	-.02	-.17**	.14*	-.37**
Mania		---	-.02	-.00	.33**
Storge			---	.13*	.21**
Pragma				---	-.04

Notes. Eros, Ludus, Mania, Storge, Pragma, & Agape =
Love Attitudes Scale; **p<.01; *p<.05

Table 7

Intercorrelations Among Love Scale Sum Scores for Men

Scale	Ludus	Mania	Storge	Pragma	Agape
Eros	-.10	-.03	.20	.00	.40**
Ludus	---	-.23	-.04	.20	-.49**
Mania		---	-.00	-.13	.57**
Storge			---	.32**	.20
Pragma				---	-.04

Notes. Eros, Ludus, Mania, Storge, Pragma, Agape = Love Attitudes Scale (Hendrick & Hendrick, 1986); ** $p < .01$.

Table 8

Intercorrelations Among Love Scale Sum Scores for Women

Scale	Ludus	Mania	Storge	Pragma	Agape
Eros	-.30**	.06	-.00	-.03	.43**
Ludus	—	.07	-.18**	.16*	-.39**
Mania		—	-.03	.00	.28**
Storge			—	.08	.24**
Pragma				—	-.04

Notes. Eros, Ludus, Storge, Pragma, Agape = Love

Attitudes Scale (Hendrick & Hendrick, 1986); ** $p < .01$,

* $p < .05$.

V. Discussion

Primary Findings

In general, these results may be interpreted as suggesting that the frequently cited distinction between passionate and companionate love did not emerge as clearly as expected. Some of the correlations between love styles and relational measures indicated that there was overlap between passionate and companionate love, at least in terms of how they were related to the comparison scales. More specifically, both Eros (passionate love) and Agape (companionate love) were significantly and positively correlated with partner commitment, partner trust, and relational satisfaction. Furthermore, despite their divergence in conceptualization, Agape and Mania were both significantly and positively correlated with greater barriers to relationship dissolution. Also, Mania and another companionate love style, Storge, were both significantly and positively correlated with partner commitment. And with the exception of a significant positive correlation with generalized trust, Storge was correlated with virtually all of the same relational variables as Eros and in the same direction, only to a lesser extent.

The dichotomy of two kinds of love was also slightly obscured by the pattern of intercorrelation of some of the love scales. Two of the passionate love styles (Ludus and Mania) seemed to represent divergent concepts as compared to Eros. Many of the variables with which Eros correlated positively were significantly and inversely correlated with Ludus. Specifically, Ludus was significantly and inversely correlated with commitment to one's partner and relationship, as well as

with satisfaction with the relationship; for Mania, correlations with these variables were not significantly different from zero. Furthermore, both of the latter love styles were inversely correlated with trust in one's partner and in one's family and friends. In contrast to Agape, another representative of the companionate side of love, Pragma, was unrelated to almost all of the relational variables; only one moderate and direct correlation was observed between this love style and barriers to relationship dissolution.

Secondary Findings

Gender Differences. Mean differences between men and women in love style scores were observed for Ludus only, with men scoring higher than women, a finding consistent with previous research (e.g., Hendrick, Slapion-Foote, & Foote, 1985). Also, some gender differences were observed for the correlates of the love styles. The differences between the correlations for men and women were not statistically significant, but the covariation among these variables was more extensive for women. Specifically, although both men and women scoring higher on Eros reported greater partner trust and relational satisfaction, women scoring higher on this passionate love scale also reported greater commitment to their partner. Furthermore, among female participants, game-playing and manic love correlated more extensively with the comparison measures than was the case among male participants. For example, for women, significant inverse correlations were observed between game-playing love and partner trust, network trust, generalized trust, as well as partner commitment. For men, this love style was strongly and inversely related only to commitment to partner and to

commitment to the relationship. For both men and women, manic love was positively related to barriers to ending the relationship, and inversely related to network trust. However, for female participants, Mania correlated significantly and positively with trait guilt, and moderately and inversely with network trust.

For companionate love styles, no significant correlations for friendship love were observed for men, and for women, Storge was positively but only moderately related to partner trust and relational satisfaction. For men and women scoring higher on pragmatic love, the nature of the correlations differed, however. Men who more strongly endorsed this kind of love reported less generalized trust, significantly less satisfaction with their life, and greater trait guilt. By contrast, women scoring higher on Pragma reported greater commitment to their relationship and barriers to its dissolution, and greater satisfaction with their life. For both genders, Agape correlated significantly with commitment to one's relationship and barriers to its dissolution. Furthermore, the magnitude of the correlations among men between selfless love and commitment suggested that men may perceive the constructs similarly.

Psychometric Properties of LAS. In general, results from the factor analyses provided support for previous descriptions (e.g., Hendrick & Hendrick, 1986) of the Love Attitudes Scale as an adequate measure, with only a few exceptions. The factor structure appeared stable and similar to previously reported analyses (e.g., Hendrick & Hendrick, 1986; Thompson & Borrello, 1992) and most of the items loaded on the appropriate factor substantially. Furthermore, intercorrelations among love scale scores indicated that the love

scales are relatively independent of each other. Agape appeared to overlap with four of the other scales, as indicated by significant correlations with Eros, Ludus, Mania, and Storge. However, these data were consistent with those reported by Hendrick and Hendrick (1986), in which Agape correlated significantly with the same scales.

Conclusions

The correlations among the love styles provided additional support for Lee's (1976) theory. For example, the inverse correlations between Ludus, commitment, and trust were in accord with Lee's (1976) notion that ludic lovers usually prefer noncommitted, emotionally detached relationships. And Mania's positive correlation with barriers to ending the relationship supported Lee's contention that these lovers often remain in an unsatisfying relationship because their discontentment with the idea of losing their partner outweighs the dissatisfaction they typically experience in their relationship. The relatively modest correlations among Storge and Pragma were not surprising, as these love styles have not emerged as strongly in previous research among college students (Hendrick, Hendrick, & Adler, 1988; Bailey, Hendrick, & Hendrick, 1987). Furthermore, as expected, both Eros and Agape were correlated with relational satisfaction, trust, and partner commitment.

Some of the correlations, however, raise questions about the frequently invoked dichotomy between passionate and companionate love. Specifically, two sources of evidence indicated that this dichotomy did not emerge strongly in the results using the LAS scales as surrogate measures of passion and

companionship. First, the measures of passionate love correlated with variables in a way which was only partially consistent with Walster and Walster's model (1978). According to these theorists, passionate love is characterized by a combination of ecstasy and satisfaction as well as bouts of misery and dissatisfaction. Concerning these aspects of passionate love, there was some cohesion among the surrogate measures. Eros correlated with what might be characterized as more satisfying facets of passionate love (e.g., life and relational satisfaction), whereas Ludus and Mania correlated with, for example, loneliness, guilt, and dissatisfaction with one's relationship. However, the relative levels of commitment and trust reported by those who more strongly endorsed Eros versus those who scored higher on Ludus and Mania seemed to represent the primary difference among these ostensibly similar love styles. Eros was more strongly related to partner commitment and partner trust than any other variables, suggesting that this love style overlapped with some of the central facets of Walster and Walster's (1978) companionate love. However, these authors suggested that commitment to one's relationship, or issues of trust, typically do not emerge until later stages of companionate love. Thus, these results are inconsistent with Walster and Walster's (1978) definition of passionate love, using the Eros scale of the LAS to represent this construct.

A second issue concerning Walster and Walster's model involves the correlations between Agape and two of the passionate love scales (Eros and Mania). More specifically, as mentioned earlier, Agape correlated significantly and positively with Mania, a finding which may be explained as reflecting

characteristics which are common to Agape and this passionate love style. Both manic and agapic lovers express concern for their partner, although manic lovers' preoccupation with their partner and the status of the relationship often leads to the exclusion of their own needs (Lee, 1976). Furthermore, the significant and positive correlation between Eros and Agape appeared to reflect both kinds of lovers' (i.e., erotic and agapic) intense need for union with the ideal other. From one perspective, these correlations were not surprising, as Hendrick and Hendrick (1986) have reported similar findings. However, the correlations between Agape and relational measures resembled those between Eros and comparison measures, with Agape more consistently and more strongly related only to commitment. Thus, the results indicated that companionate love as measured by Agape and passionate love as measured by Eros were more strongly related to each other than either was to the remaining passionate/companionate styles. Furthermore, these kinds of love appear to be the unique examples of passionate and companionate love, as they diverge from the model which characterizes love as exclusively passionate or companionate.

There appeared to be utility in distinguishing between, for example, kinds of love (e.g., Ludus and Mania) characterized either by whim or sexual attraction or by more stable companionship (e.g., Storge and Pragma). More precisely, the relatively consistent, although occasionally modest, correlations which emerged between these kinds of love and relational measures partially supported Walster and Walster's (1978) model. However, because Eros and Agape appear to represent prototypes of Walster and Walster's passionate and companionate love,

the overlap between the correlations among these love styles and related variables has particularly important implications for the two-component model. More specifically, the pattern of correlations between Eros and Agape did not reflect Walster and Walster's clearly outlined distinction; hence, the viability of a model of mutually exclusive kinds of love is questionable in its current form. Moreover, the model does not account for the likelihood that passion/sexual attraction and companionship/commitment coincide during the course of love relationships. More specifically, although commitment and trust ostensibly are more characteristic of less emotionally intense and established long-term relationships (e.g., Storge, Pragma), such variables were not as significantly and consistently related to these companionate love styles. Rather, commitment and trust were more significantly and consistently related to passionate love characterized by sexual attraction, physical "chemistry", and intense lovemaking. In short, there seem to be different variations of love not explained by Walster and Walster's model.

Limitations

Several characteristics of this study limit the generalizability of these data. First, the study was predicated on the assumption that the subsets of the love styles represented the two-component model of love with reasonable accuracy. To the extent that this assumption is not justified, these results would be irrelevant to the distinction proposed by Walster and Walster.

Second, because these data were drawn from a sample of undergraduate students, they were not necessarily representative of the larger population of

more mature individuals in long-term or marital relationships. An exploration of love attitudes among couples who have been married a number of years might have yielded different results. Specifically, Storge and Pragma were not endorsed as strongly among college students, and perhaps such kinds of love would emerge more strongly among couples who have raised children or have endured stressful events during the course of a long-term relationship. Also, a more varied segment of the population, such as gay and lesbian couples or individuals from diverse ethnic populations, might have provided useful information concerning the dynamics of love within diverse cultural contexts and among differing kinds of love relationships.

Third, comparisons of the love styles with several other measures may prove fruitful. More diverse predictor variables, such as jealousy or sexual attitudes, may further explicate the ostensible divergence of passionate and companionate love. Perhaps a more direct approach of exploring the nature of companionate love would involve developing a unique inventory for this kind of love and assessing its utility as a measure using a sample of married couples of various ages and backgrounds.

Summary

Despite these limitations, this study raises important questions regarding the utility and/or generalizability of the two-component model for love. The correlations between relational variables and love styles, and the intercorrelations among the love styles, are evidence that such a model may be an oversimplification. Rather than drawing an *a priori* distinction between two

kinds of love, an alternative approach might involve an exploration of love in the context of a longitudinal study. One issue in particular which merits further exploration concerns the stability of love styles over time. It has been suggested (i.e., Hendrick & Hendrick, 1988) that the love styles are tempered, and even changed, by new experiences. Researching the nature of love over the course of a relationship may also address a focal point of Walster and Walster's (1978) model; specifically, the transition from passionate into companionate love may be explored. One shortcoming with the assumption that most couples experience this transition is that it does not explain, for example, storgic lovers' initial friendship/companionship as the basis for a love relationship, in which passionate attraction does not seem to play an integral role. In fact, this kind of love would oppose the premises of Walster and Walster's model.

As was suggested by the relationship of Eros to a number of variables associated with volitional (commitment) and long-term characteristics, as well as to Agape, there appear to be different variations of love which do not conform to a two-component model. However, although Lee (1988) acknowledged the possibility that other ideologies of love may not be represented in his model, his typology and descriptive approach to different "colors" of love seems to allow for a more comprehensive and less restricted explanation of the phenomenon. Linking this love typology to other models of love appears to be beneficial, as doing so may allow researchers to generate and agree upon a more common set of conceptual and explanatory descriptions of love.

REFERENCES

References

- Adams, J. M. (1994). (1994, August). The psychometric assessment of marital commitment: A comparison of definitions. American Psychological Association, Los Angeles.
- Ainsworth, M. (1982). Attachment: Retrospect and prospect. In S. M. Parkes & J. Stevenson-Hinde (Eds.), The place of attachment in human behavior (pp. 3-30). New York: Basic Books.
- Aron, A., & Aron, E. N. (1994). Love. In A. L. Weber & J. H. Harvey (Eds.), Perspectives on close relationships (pp. 131-152). Needham Heights, MA: Allyn & Bacon.
- Askew, M. W. (1965). Courtly love: Neurosis as institution. Psychoanalytic Review, 52, 19-29.
- Bailey, W. C., Hendrick, C., & Hendrick, S. S. Relation of sex and gender role to love, sexual attitudes, and self-esteem. Sex Roles, 16, 637-648.
- Bem, S. L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.
- Berscheid, E., & Walster, E. (1974). Physical attractiveness. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 1, pp. 157-215). New York: Academic Press.
- Blau, P. M. (1964). Exchange and power in social life. New York: Wiley.
- Bowlby, J. (1969). Attachment and loss (Vol. 1). New York: Basic Books.

- Branden, N. (1988). A vision of romantic love. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp. 218-231). New Haven, CT: Yale University Press.
- Byrne, D., & Murnen, S. K. (1988). Maintaining loving relationships. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp. 293-310). New Haven, CT: Yale University Press.
- Campbell, J. (1988). The power of myth. New York: Doubleday.
- Cantril, H. (1965). The patterns of human concern. New Brunswick, NJ: Rutgers University Press.
- Couch, L. L. (1994). The development of the Trust Inventory. Unpublished master's thesis, University of Tennessee, Knoxville.
- Couch, L. L., & Jones, W. H. (1995, August). New concepts of trust: Reliability and validity evidence. American Psychological Association, New York.
- Cuffel, B. J., & Akamatsu, T. J. (1989). The structure of loneliness. Cognitive Therapy and Research, 13, 459-474.
- Davis, K. E., & Todd, M. (1982). Friendship and love relationships. In K. E. Davis (Ed.), Advances in descriptive psychology (Vol. 2, pp. 79-122). Greenwich, CT: JAI Press.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. Journal of Personality Assessment, 49, 71-75.
- Dion, K. L., & Dion, K. K. (1973). Correlates of romantic love. Journal of Consulting and Clinical Psychology, 41, 51-56.

- Dion, K. L., & Dion, K. K. (1988). Romantic love: Individual and cultural perspectives. In R. J. Sternberg and M. L. Barnes (Eds.), The psychology of love (pp. 264-289). New Haven, CT: Yale University Press.
- Dion, K. K., & Dion, K. L. (1975). Self-esteem and romantic love. Journal of Personality, 43, 39-57.
- Driscoll, R., Davis, K. E., & Lipetz, M. E. (1972). Parental interference and romantic love: The Romeo and Juliet effect. Journal of Personality and Social Psychology, 24, 1-10.
- Fehr, B. (1988). Prototype analysis of the concepts of love and commitment. Journal of Personality and Social Psychology, 55, 557-579.
- Freud, S. (1953). Contributions to the psychology of love: A special type of choice of objects made by men. In E. Jones (Ed.), Collected Papers (Vol. 4). London: Hogarth Press.
- Fromm, E. (1956). The art of loving. New York: Harper.
- Guttentag, M., & Secord, P. F. (1983). Too many women? The sex ratio question. Beverly Hills, CA: Sage.
- Hall, A. G., Hendrick, S. S., & Hendrick, C. (1991). Personal construct systems and love styles. International Journal of Personal Construct Psychology, 4, 137-155.
- Hatfield, E. (1988). Passionate and companionate love. In R. J. Sternberg and M. L. Barnes (Eds.), The psychology of love (pp. 191-213). New Haven, CT: Yale University Press.

- Hatfield, E., & Sprecher, S. (1986). Measuring passionate love in intimate relations. Journal of Adolescence, 9, 383-410.
- Hartshorne, T. S. (1993). Psychometric properties and confirmatory factor analysis of the UCLA Loneliness Scale. Journal of Personality Assessment, 61, 182-195.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511-524.
- Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley.
- Hendrick, C., & Hendrick, S. S. (1986). A theory and method of love. Journal of Personality and Social Psychology, 50, 392-402.
- Hendrick, S. S., & Hendrick, C. (1987a). Love and sex attitudes and religious beliefs. Journal of Social and Clinical Psychology, 5, 391-398.
- Hendrick, S. S., & Hendrick, C. (1987b). Multidimensionality of sexual attitudes. The Journal of Sex Research, 23, 502-526.
- Hendrick, S. S., & Hendrick, C. (1988). Lovers wear rose colored glasses. Journal of Social and Personal Relationships, 5, 161-183.
- Hendrick, S. S., & Hendrick, C. (1992a). Liking, loving, and relating. Pacific Grove: Brooks/Cole Publishing Company.
- Hendrick, S. S., & Hendrick, C. (1992b). Romantic love. Newbury Park, CA: Sage Publications.
- Hendrick, S. S., & Hendrick, C. (1993). Lovers as friends. Journal of Social and Personal Relationships, 10, 459-466.

- Hinde, R. A. (1984). Why do the sexes behave differently in close relationships? Journal of Social and Personal Relationships, 1, 471-501.
- Jones, W. H., Adams, J. M., Monroe, P., & Berry, J. O. (1994). Marital Satisfaction and Commitment Scales. Manuscript submitted for publication.
- Jones, W. H., & Kugler, K. (1993). Interpersonal correlates of the Guilt Inventory. Journal of Personality Assessment, 61, 246-258.
- Klein, M., & Riviere, J. (1953). Love, hate, and reparation. London: Hogarth Press.
- Knight, R. G., Chisholm, B. J., Marsh, N. V., & Godfrey, H. P. (1988). Some normative reliability and factor analytic data for the revised UCLA Loneliness Scale. Journal of Clinical Psychology, 44, 203-206.
- Koenigsburg, (1967). Culture and unconscious fantasy: Observations on courtly love. Psychoanalytic Review, 54, 36-50.
- Kugler, K., & Jones, W. H. (1992). On conceptualizing and assessing guilt. Journal of Personality and Social Psychology, 62, 318-327.
- Lasswell, T. E., & Lasswell, M. E. (1976). I love you, but I'm not in love with you. Journal of Marriage and Family Counseling, 2, 211-225.
- Leak, G. K., & Gardner, L. E. (1990). Sexual attitudes, love attitudes, and social interest. Individual Psychology, 46, 55-60.
- Lee, J. A. (1976). Colors of love. New Jersey: Prentice Hall.
- Lee, J. A. (1988). Love styles. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp. 38-67). New Haven: Yale University Press.

- Maslow, A. H. (1962). Toward a psychology of being. Princeton, N. J: Van Norstrand.
- May, R. (1953). Man's search for himself. New York: Norton.
- Mellen, S. L. W. (1981). The evolution of love. San Francisco: Freeman.
- Money, J. (1980). Love and love sickness: The science of sex, gender differences, and pair-bonding. Baltimore: John Hopkins University Press.
- Mosher, D. L. (1968). Measurement of guilt in females by self-report inventories. Journal of Consulting and Clinical Psychology, 32, 690-695.
- Murray, H. A. (1938). Explorations in personality. New York: Oxford University Press.
- Murstein, G. (1988). A taxonomy of love. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp. 13-37). New Haven: Yale University Press.
- Peck, M. S. (1978). The road less traveled: A new psychology of love, traditional values, and spiritual growth. New York: Simon & Schuster.
- Peele, S. (1988). Fools for love: The romantic ideal, psychological theory, and addictive love. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp. 159-188). New Haven: Yale University Press.
- Peele, S., & Brodsky, A. (1976). Love and addiction. New York: NAL.
- Raciti, M., & Hendrick, S. S. (1992). Relationships between eating disorder characteristics and love and sex attitudes. Sex Roles, 27, 553-564.
- Reik, T. (1941). Of love and lust. New York: Farrar, Straus, & Cudahy.
- Rosch, E. (1973). Natural categories. Cognitive Psychology, 4, 328-350.

- Rubin, Z. (1970). Measurement of romantic love. Journal of Personality and Social Psychology, 16, 265-273.
- Russell, D. (1982). The measurement of loneliness. In L. A. Peplau & D. Perlman (Eds.), Loneliness: A sourcebook of current theory, research, and therapy (pp. 81-104). New York: Wiley.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. Journal of Personality and Social Psychology, 39, 472-480.
- Schachter, S. (1964). The interaction of cognitive and physiological determinants of emotional state. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 1, pp. 49-80). New York: Academic Press.
- Sternberg, R. J. (1986). A theory of love. Psychological Review, 93, 119-135.
- Sternberg, R. J. (1988). Triangulating love. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp. 119-138). New Haven: Yale University Press.
- Sternberg, R. J., & Grajek, S. (1984). The nature of love. Journal of Personality and Social Psychology, 47, 312-329.
- Tennov, D. (1979). Love and limerance. New York: Stein & Day.
- Traupmann, J., & Hatfield, E. (1981). Love and its effect on mental and physical health. In J. March, S. Kiesler, R. Fogel, E. Hatfield, & E. Shana (Eds.), Aging: Stability and change in the family (pp. 253-274). New York: Academic Press.

- Tucker, P., & Aron, A. (1993). Passionate love and marital satisfaction at key transition points in the family life cycle. Journal of Social and Clinical Psychology, 12, 135-147.
- Walster, E., & Walster, G. W. (1978). A new look at love. Lantham, MA: University Press of America.
- Wilson, G. (1981). The Collidge effect: An evolutionary account of human sexuality. New York: William Morrow.
- Woll, S. (1989). Personality and relationship correlates of loving styles. Journal of Research in Personality, 23, 480-505.
- Zakahi, W. R., & Duran, R. L. (1982). All the lonely people: The relationship among loneliness, communicative competence, and communication anxiety. Communication Quarterly, 30, 203-209.
- Zuckerman, M. (1979). Sensation-seeking: Beyond the optimal level of arousal. Hillsdale, N. J.: Erlbaum.

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