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ATTITUDES TOWARD LOVE: A DEVELOPMENTAL INVESTIGATION

by

Brenda Elizabeth Munro

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family and Human Development

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Abstract

Attitudes Toward Love: A Developmental Investigation

by

Brenda Elizabeth Munro, Master of Science

Utah State University, 1976

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Department: Family and Human Development

Prior research has suggested age related changes in attitudes toward love. The present study was completed to extend this assumption to high school and college educated samples and across stage of life. Both samples included a proportionate number of males to females. A new instrument (measuring a Conjugal Love Factor, Romantic Power Factor and a Romantic Idealism Factor) was generated for use in this study. In addition the Knox Love Attitude Inventory (1970), the Rubin Love Scale (1970) and a short form of Rotter's I-E Scale (Vlecha and Ostrom, 1974) were also administered to each sample.

Results indicated that the high school sample held more romantic attitudes and fluctuated in their attitudes toward love over the various stages of life more than the college sample. Fluctuation for the high school sample, on most instruments involved a significant digression in romantic attitudes when children were being reared in the home and a sharp rise in romantic conceptions when children were no longer in the home (curvilinear relationship). Conjugal attitudes for the high school

group followed a linear progression. The high school educated sample began low in conjugal attitudes but progressed across the stages to a more conjugal conception of love. Locus of control was also found to affect the way in which one viewed love, particularly in adolescence. Internal adolescents were significantly less romantic than external adolescents. Surprisingly sex differences were not found to consistently affect love attitudes.

(73 pages)

Introduction

The Mystery of Love

The mysterious power of love is exhibited in the Tristanian style of novel writing. A Tristanian love story begins with the initial meeting of a male and female at which time one, neither, or both may find the other attractive. This initial meeting is followed by one or both of the individuals finding it impossible to terminate the relationship despite many difficulties in maintaining it. An example of this phenomenon may be seen in Of Human Bondage, where Philip in meeting Mildred finds her unattractive but subsequently finds he "could not get her out of his mind" (Maugham, 1973, p. 267). Futile attempts are made to gain self control, illustrated when Philip knows he should quit coming to the tea shop where Mildred works but cannot help himself and so continues coming. One or both of the characters continue to be driven by this mysterious force which is later defined as love. Regardless of this guiding power (love) the relationship develops many problems, as in the case of Philip and Mildred who are "always on the verge of a quarrel (Maugham, 1963, p. 284). Examples of this style are repeated innumerable times, e.g., Love Story, Romeo and Juliet, and West Side Story (Lee, 1973).

The Tristanian style of writing is only one form by which the dynamic mysterious power of love is exhibited in novels and movies. Other illustrations would be cases in which the anxieties, exemplifying the Tristanian style, are risen above, defeated, or overcome.

Examples of such movies would be, The Graduate, or The Sound of Music, where love begins to grow between the least likely persons and this love is sustained. For example, in The Sound of Music, rich Captain Von Trapp suddenly realizes that he has fallen in love with Maria, the poor nun who is caring for his children. Although these two would be considered the least probable combination, the outcome, because of their love, is the marriage of the two. Further, through their love, they as individuals are emboldened and strengthened in a number of situations including their eventual escape from the Nazis. Their love mysteriously developed, by no conscious effort of their own, to a dynamic force allowing them to rise above problems which may have placed the relationship in jeopardy. This demonstrates a totally different aspect of love, by attributing to it, what seems to be a dynamic power. Love then is sometimes viewed as a freeing power rather than a bonding power.

The elusive quality of love is also frequently seen in both prose and poetry. The mystery of love has been expressed in various ways (see Table 1). For example, Shakespeare illustrates both the undefinability and mystery of love as he searches its meaning, but comes to the conclusion that it cannot be defined due to its changing quality. Whitman's poem eludes to the power of love as surpassing the power of fine art, tradition, and culture, while Green accentuates the need for love. Hence, love is a powerful and needed, yet mysterious and undefinable force. This is a message conveyed not only by these examples but also by innumerable other examples of prose and poetry (e.g., Robert Browning's, Evening, and John Donne's, Love's Alchemy).

Table 1
 Different Qualities of Mystery Expressed
 in Prose and Poetry

Quality	Title	Example
Undefinable	<u>O Mistress Mine</u>	William Shakespeare "What is love? 'Tis not hereafter; Present mirth hath present laughter What's to come is still unsure" (Blair & Gerber, 1960, p. 888)
Mysterious	<u>O Mistress Mine</u>	William Shakespeare "What is love? 'Tis not hereafter; Present mirth hath present laughter What's to come is still unsure" (Blair & Gerber, 1960, p. 888)
Powerful	<u>Once I Passed Through a Populous City</u>	Walt Whitman "Once I pass'd through a populous city imprinting my brain for future use with its shows, archi- tecture, customs, traditions, Yet now of all that city I remem- ber only a woman I casually met there who detain'd me for love of me," (Blair & Gerber, 1960, p. 960)
Needed	<u>The Heart of the Matter</u>	Graham Green "Do you love me, Ticki?" "What do you think?" "Say it, one likes to hear it - even if it isn't true" "I love you, Louise. Of course it's true." (Lee, 1973, p. 209)

Modern songs depict the baffling efforts to comprehend or identify the conflicting concepts of love. Love themes depicted in song may present pain and trouble to be avoided, or to be participated in because of an unexplainable desire in spite of difficulties (e.g., "So at least until tomorrow, I'll never fall in love Again," Burt Bacharach). Songs may also present a 'life is nothing without you' theme. David Horton and S. I. Hayakawa (1957) have demonstrated a type of love cycle which pervades contemporary song writing in a pattern of, "expectation, through courtship, to disenchantment and recovery and thus to new anticipations" (Lee, 1973, p. 189). Each level of this cycle in song writing, however, is fraught with a mysterious air which transcends reality or does not conform to expectations.

Hence, literature, movies, and songs have provided inexhaustible examples of forms of love and the mystique generated by the development thereof. Much time and money has gone into portraying the elusiveness of love through the arts, but very little empirical understanding of the phenomenon has come as a result. Those who participate in these art forms, though extremely interested in the occurrence and growth of love, elucidate primarily the mysterious form in which love is enshrouded. The arts attest to the importance of love, although they present little in the way of building a framework for the study of love. Despite these abstract formations of love there seems to exist progressive, developmental levels of love. These developmental levels have been suggested by many theorists who will be briefly discussed next.

Conceptions of Love: Developmental Approaches

Riess (1960), working from a sociological background, assumes a macro-functionalist view of love and its development. Riess, in fact, completely discounts the individual need patterns as illustrated by stating:

From our point of view, the love object could have been a number of people with similar socio-cultural characteristics. Chance factors led to it being this particular person. Thus, even here an 'individualistic' explanation is not needed. (Riess, 1960, p. 142)

In essence the only causal factors that Riess suggests are social cultural functions. He states that cultural backgrounds produce certain types of personalities which will mesh well with other personalities of like cultural backgrounds. These are the people between whom love relationships will develop.

His main thrust is directed at a cyclical model of love development. That is, there is a set pattern through which each love relationship will pass to grow and mature to its fullest extent. Primary love relationships such as mother-child love, love of friend and heterosexual love would each pass through this pattern of development. Riess's conception of the development of love, educes one level from the former, thus, a totally new form of love evolves. This distinguishes him as a qualitative, rather than a quantitative theorist, e.g., love does not merely increase in magnitude, it changes form. He postulates that first rapport must be felt which may develop concomitantly with self revelation, followed by the development of mutual dependency and personality need fulfillment. Through the emphasis upon the evolving power of love, Riess emphasizes the vicissitude of the concept. Love is not seen as something static and unchanging, but rather as a

developing growing force. Reiss may then be described as a cyclical developmental love theorist who begins from a sociological perspective.

In contrast to Reiss, Bloom and Orlinsky appear quite different in their perspective. Orlinsky (1972) and Bloom (1967) assume a more personal psychological position with a psychoanalytic emphasis. These theorists emphasize the process by which love is expected to develop within the individual. They do not elude to the cultural or sociological pressures as having a substantial affect upon the individual. One individual may be instrumental in influencing the love development of another individual, but this sustains these theories at the personal psychological level. This is in direct contrast to Reiss's (1960) social interactional theory. Love grows through the reciprocation of love. The love reciprocated individual may be seen as the causal factor in the growth of love within the individual receiving the love (a S-R relationship). As may be seen in the friendship stages of both Bloom and Orlinsky, this relationship could never have come about without the reciprocal love of another person. Friendship takes two.

These perspectives are viewed as qualitative theories in that development of love is an evolutionary process. Love as it matures and grows will inevitably take a different form. For example, Orlinsky (1972) would assert that a love relationship passes from a romantic love stage to mutual love stage (conjugal love). Each of these are different types of love and yet one has grown from the other. This dynamic growth process which is theorized by both would directly oppose a static love theory. Love is not, according to Orlinsky and Bloom an unchanging quality, but a quality whose dimensions mature and expand until the initial agent is no longer the same as the last. These

theorists view this development as a linear function, unlike Riess (1960), who says the processes are cyclical. Love is a phenomenon with a beginning and end, with set stages or levels in between.

Although both Bloom and Orlinsky have differing general frameworks describing the development of love, both exhibit many similar structural characteristics. These may be compared and contrasted with Riess's framework. Recognizing that Riess (1960) is a sociologist and Bloom (1967) and Orlinsky (1972) are psychologists, there will inevitably be differences, in the conception of causal factors. Riess is predisposed to take a macro-functionalist view over the individualist view of Bloom and Orlinsky. However, there are also similarities, illustrated in the qualitative, dynamic developmental theories presented by all three men. There is no discrepancy in the belief that love follows an evolutionary pattern rather than remaining in a static state. This change or evolution of love is seen by Riess (1960) and Bloom (1972) as a function of age and experience. Having now found the similarity in the belief that the change in character of love comes with age and experience, it would be very illuminating to see to what extent these perspectives are represented in the research literature.

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Review of Literature

Given the paucity of empirical data about the developmental process of love and loving, few empirical studies can be found that can be integrated into a complete picture. Therefore, only those studies which have looked at the attitudes about romantic and conjugal love will be reviewed.

Knox and Sporakowski (1968) have examined the dichotomy between romantic and conjugal love. Romantic love was defined as a belief that love is exciting, entangling, inspiring jealousy, and at times difficult to comprehend; while conjugal love was assumed to be a calm, realistic, cognitive quality (the same general definitions have been applied within the present study). A conjugal love attitude was assumed if the respondent scored low on romantic love questions. Twenty-nine items were administered to 100 males and 100 females of college age. Females were, in contrast to males, more realistic or conjugal in their attitude towards love (Knox & Sporakowski, 1968).

Two additional successive studies have been conducted by Knox (1970a, b). These studies examined the dichotomy between romantic and conjugal love over three age levels. The three ages included high school students, individuals married five years or less, and persons married over 20 years. All were middle class, white and reared in the United States. The dependent measure in these two studies consisted of the modified version of the Knox and Sporakowski (1968) scale entitled

The Love Attitude Inventory. Through implementing the Knox (1970a, b) scale, a curvilinear relationship between attitudes toward love and age of the respondents was found indicating a high romantic orientation among high school seniors, realistic conception of love by the young marrieds, and a more romantic conception of love by those married 20 years or more. These studies illuminate the very important phenomenon of the change in the consistency of love over time. From these data Know (1970a, b) has proposed that amount of education may change an individual's conception of love. That is, the longer an individual attended college the more realistic he would become in his conception of love. This implies that education is of prime importance but it would also seem logical that age and number of children to be cared for by the family may also play a significant role in the type of love exhibited.

One criticism of the Know research is the apparent deficiency in the ability of the Know and Sporkowski (1968) and Know (1970a, b) scales to differentiate between romantic and conjugal love. According to Adams and LaVoie (1974) this scale clearly measures emotionalism, idealism, feeling that there is one special person and that social barriers are unable to separate two individuals in a loving relationship. The problem is that there are no questions directed toward the assessment of the actual existence of conjugal love. Rather it is assumed that qualities of love not considered romantic, are, by default, conjugal which would be appropriate if one considers nonromantic love to be conjugal love. Due to this limiting factor these investigators propose that the scale should only be used as a measurement of conjugal love.

An additional study offers further insight into the developmental process. Neiswender, Birren and Schaie (1975) investigated the qualitative dimensions of the experiences of love in adulthood, and their relative importance as related to age, sex, and marital status. Through a Q-sort of 144 statements, eight raters independently classified the statements into an *a priori* system. Six modes of love were reflected, including affective, cognitive, behavioral, verbal, physical, and fantasy dimensions. Twenty-four couples divided into four groups (adolescent, mean age, 19 years) young adults (mean age, 29 years), middle age adults (mean age, 50), and older adults (mean age, 73 years) completed the Q-sort reflecting his or her current experience of being in love.

Fantasy is defined in this study as an attitude towards love which involves hoping, wishing, dreaming and idealizing. In that the definition of fantasy is highly correlated with the definition of attitudes of romantic love, fantasy could be seen as a portion of romantic love. Interestingly, the data on fantasy responses echoed those of Knox (1970a, b) by producing a curvilinear relationship. That is, these researchers found a strong fantasy orientation in adolescence, followed by low fantasy in the young adult and middle age adults, and finally a fantasy-romantic conception of love among the older adults. This curve was viewed as a process of aging in that there are differential influencing factors among different age groups. The adolescent group experiences greater exposure to the romantic love themes than the

middle aged groups while older adults may experience "defensive" forgetting. "Defensive" forgetting may be an attempt to justify spending an entire lifetime within a given relationship.

Another insightful study was completed by Driscoll, Davis and Lipetz (1972). These investigators hypothesized that attitudes of love are more highly correlated with trust and acceptance as the relationship matures over time. In other words love tends to move from a romantic state into a conjugal state over time. Their definition of romantic love was partially adapted from Rubin's (1970) study in that "romantic love is an affiliative and dependent need, feelings of exclusiveness and absorption and the predisposition to help" (Driscoll, Davis & Lipetz, 1972, p. 3). Through examination of these two definitions it became obvious that many dimensions of love may overlap and in essence be a part of both types of love. For this reason it was specified that conjugal love was primarily associated with trust.

One hundred and forty couples were studied on a longitudinal basis over a 6 to 10 month period. A questionnaire was used to assess the feelings of the couples involving conjugal and romantic love. The final results were consistent with what the researchers hypothesized, that is, attitudes of love are more highly correlated with trust and acceptance as the relationship matures over time.

Implicit in this finding is evidence that there is a change in the quality of the love or loving relationship over time. Love is exposed once again not as a static quality but rather a growing maturing entity.

All of these empirical studies have emphasized a process of change or development affiliated with attitudes of love. The investigators

have assessed the causal factors to be age, time, and amount of education. The highly educated individual should possess the most realistic conception of love according to Know (1970a, b). Adolescent and elderly individuals should possess the most romantic attitude towards love according to Neiswender, Birren and Schaie (1975). These tests do not, however, take into account individual differences between people in personality. Therefore one purpose of the present study was to empirically investigate the affects of differences in personalities upon attitudes toward love at varying age levels.

Rotter (1966) has postulated two opposing types of generalized expectancies from which individuals view themselves and their effect upon the environment. Internals typically view reinforcement as contingent upon one's own behavior while externals expect reinforcement to be determined primarily by luck, chance, fate, or powerful others.

Using Rotter's conceptualization, Dion and Dion (1973) hypothesized that external persons would be more prone to view love as being mysterious and volatile than would internal individuals. Likewise, internal persons were expected to view love in a less idealistic and more realistic way than external persons. By applying Rotter's I-E scale and a romantic questionnaire, these two variables were correlated. The results supported the investigators' expectation in that:

Internals experienced romantic attraction as less mysterious and less volatile than externals. Moreover, internals more strongly opposed an idealistic conception of romantic love than externals. (Dion & Dion, 1973, p. 8)

This implies that individuals with internal personalities would tend to maintain a more conjugal emphasis.

If the findings on the effects of I-E characteristics were to be replicated and correlated with the measures of romantic and conjugal love for individuals at varying ages, it would imply a variation in the curve of the relationships. The Dion and Dion (1973) data suggests that internally controlled persons, in comparison to external persons, should be less romantic and more conjugal in their attitudes toward love at all age levels. However, on romantic measures, externals would be expected to exhibit a curvilinear relationship between age and attitude similar to that found by Knox (1970a, b) and Neiswender, Birren and Schaie (1974). A curvilinear relationship is expected because the external personality is influenced by forces and persons around him. In adolescence, peer pressure would dictate romanticism while during the middle years children's demand for time and attention would produce a conjugal love relationship between the parents. In later life, when the children are gone the parents perhaps, through "defensive" forgetting, would idealize their partner and once again become romantic. This belief is quite different from that of Knox (1970) who contends that the curvilinear relationship of measures of love attitudes may be merely due to increased education that covaries with age.

Furthermore, Kephart (1967) studied the difference in romantic orientation of males and females. Students were asked to retrospectively describe former experiences of romantic infatuation as well as current love experiences. Results indicate that prior to marriage, females are significantly more romantic, but those contemplating marriage enter a "monogomistic ideal," e.g., the engaged girl will most

often not be interested in any one but her fiancé. At this point a change takes place, the female no longer is pushed by romantic compulsions, but on the contrary, the male becomes differentially romantic. The later finding (males more romantic than females) is also documented in the empirical studies of Knox and his colleague (Knox & Sporkowski, 1968; Knox, 1970a, b). Knox has found married males to be more romantic in their conception of love while females tended to be more realistic or conjugal. Implied by this information is a development change toward conjugal love by females at the time of marriage which is not evident among males. Therefore, potential sex differences across the various stages of life were investigated in the present study.

Research Limitations

Based on the foregoing information, it becomes obvious that many formidable problems arise in the study of love. One obstacle is the lack of empirical tools to be utilized in the investigation of attitudes about love. It seems almost unbelievable that studies of love are so lacking, considering that we live in a monogamous society for which love is considered a basis for marriage. This expectation of marriage produces premarital adumbrations such as an engaged girl will most likely not show much interest toward anyone other than her fiancé.

An additional problem seems apparent when attempting to analyze the pattern maturing love might pursue. Following the footsteps of others (Knox, 1970a, b; Neiswender, Birren & Schaie, 1975) it would be enlightening to ascertain the quality of love at varying age levels.

Thus a major objective of this study has been the investigation of the development of love through four stages of life.

A third problem arises in the study of love and loving when differing types of personality traits are introduced. It is evident that varying personality characteristics will inevitably effect one's attitude towards love.

Love has been shown in theoretical and empirical studies to be a changing entity affected by sex, personality, age, and education. These are but a few factors associated with the attempt to understand love and loving. Through the empirical study of these problems, hopefully some additional insight will be added to the knowledge of love.

Objectives

The empirical studies reviewed although scanty in number, illustrate the impending necessity for further research. Therefore, the objectives of the present study were:

1. Examine the developmental pattern of attitudes toward love (conjugal and romantic) at four stages of life (high school, married without children, married with children, and married with adult children) using a cross-sectional methodology.
2. Investigate the mediating effects of internal and external locus of control on the curvilinear relationship between stage of life and attitudes towards love.
3. Specify potential sex differences.
4. Examine the effects of education on the proposed developmental trends.

Methods

Instrument Construction

Given that Adams and LaVoie (1974, Note 1), have criticized the ability of the Knox and Sparakowski (1968) scale to assess both romantic and conjugal attitudes, attempts at constructing a new scale were completed in three separate pilot studies. First, items were written which were believed to measure romantic and conjugal love attitudes. These items were then factor analyzed to assess construct validity. In addition, correlations were completed between items within factors and between items and other scale totals which have purported to measure romantic attitudes. The later analyses were completed to assess concurrent validity. Second, the new romantic and conjugal love items were administered to a group of college students who were told to either assume an engaged persons role or married persons role and respond to the items accordingly. Third, three separate groups were identified and administered the new love scale items. These groups included engaged persons, married persons and divorced persons. The rationale, used in pilot 2 and 3, was that engaged persons should according to cultural beliefs be more romantic than conjugal in their attitudes while the other groups should be more conjugal than romantic in their perspectives. Therefore pilots 2 and 3 were attempts at providing predictive validity for the scales under consideration.

Pilot 1. Romantic items were drawn from a pool of 31 literary quotations from popular romantic literature. These items reflected personal romantic views which appear to idealize the romantic situation, project affiliative or dependent needs, show signs of possessive exclusiveness, personal absorption in another and in general demonstrate a predisposition to emotional sensations. These characteristics have been found to be components of the definition of romantic love by previous researchers (Knox & Sporkowski, 1968; Rubin, 1970; Driscoll, Davis & Lipetz, 1972; Kephart, 1967). In addition 27 conjugal items were constructed using the following definition of conjugal love. Previous researchers have defined conjugal love as a calm, rational, realistic, cognitive attitude which contains a strong sense of personal trust in another (Knox & Sporkowski, 1968; Driscoll, Davis, & Lipetz, 1972).

To assess which of the total 57 items were valid measures of romantic and conjugal love attitudes, responses from 302 university students were factor analyzed. Principle Components factor analysis using both orthogonal and oblique rotations were completed on these items. Table 2 summarizes the results of these analyses. Three meaningful factors emerged. Factor 1 can be described as a Romantic Ideal Factor which describes love as an idealistic state. Factor 3 can be described as a Romantic Power Factor. This factor views love as a powerful interpersonal force. In contrast, factor 2 measures a conjugal love construct. An appropriate label for this factor might be the Conjugal-Rational Love Factor. This factor describes love as a warm, secure, sharing experience.

Table 2
 Orthogonal and Oblique Rotated Factor Analyses
 of Romantic and Conjugal Items

	Orthogonal		Oblique	
	Factor loading	h^2	Factor loading	h^2
Factor 1				
1. Love is the highest goal between a man and a woman	.61	.40	.61	.40
2. Love is more important than any chance or opportunity for success in profession or business	.46	.39	.48	.39
3. Many years of being in love deepens rather than exhausts the sense of pleasure that partners feel for each other	.38	.41	.43	.41
4. One should not marry unless one is absolutely sure that one is in love.	.60	.51	.63	.51
5. Love is the most important thing in a relationship	.59	.50	.61	.50
6. Love is the essence of life.	.56	.38	.49	.38
7. A true lover would rather be deprived of all his money and of everything the human mind can imagine ... than be without love	.44	.39	.51	.39
8. To live in love is more pleasant than any other way of live in the world	.61	.47	.65	.47
9. Love offers an incentive to do good.	.48	.38	.52	.38

Table 2

Continued

	Orthogonal		Oblique	
	Factor loading	h^2	Factor loading	h^2
Factor 2				
1. Erotic and romantic feelings toward another are poor signs toward indicating a long and stable love relationship	.36	.21	.38	.21
2. It is more important to feel calm and relaxed with the one you love, rather than excited and romantic	.63	.46	.65	.46
3. A decision to marry should come from serious thinking not just a feeling of love	.49	.36	.49	.36
4. A successful love relationship is secure, not overtly exciting and something which has been thought out	.42	.40	.44	.40
5. Jealousy does not play a part in a lasting love relationship	.30	.37	.37	.37
6. Good companionship is more important than romantic love in making a good marriage	.58	.46	.50	.46
7. Romantic love is only temporary; it soon disappears. Most marriages require a sense of mutual sharing and compromise, rather than romantic love, in order to succeed	.60	.37	.59	.37
8. Love is feeling warm, close and involved, but not necessarily sexually excited	.70	.52	.69	.52

Table 2

Continued

	Orthogonal		Oblique	
	Factor loading	h^2	Factor loading	h^2
Factor 3				
1. There can be no real happiness or success in life for those in a poor love relationship	.42	.36	.38	.21
2. There can be no genuine failure in life for those in love	.38	.58	.65	.46
3. True love never dies, it surmounts all obstacles	.29	.52	.49	.36
4. Strong love survives all troubles and obstacles	.32	.49	.43	.40
5. If love between two people dies, if it crumbles into meaninglessness, then everything is gone	.53	.46	.37	.37
6. When one partner in a love relationship is weak, the other must be strong	.44	.42	.60	.46
7. Love is an intense flame which devours the roughness in each loved person, leaving only what is pure and fine	.67	.51	.59	.37
8. What lies ahead is important only as it will give us or deny us a chance to realize our love	.53	.38	.69	.52
9. Just being together with the one you love takes away any worries over the future	.64	.45	.58	.47

Note: Significance is set at the .30 leading or better according to tradition. Factor 1 accounted for 16.6% of the total variance, Factor 2 accounted for 9.4%, and Factor 3 accounted for 5.5% in the orthogonal rotated analysis.

Internal consistency of the three factors was assessed by computing inter-item correlations and item to total factor score correlations. Table 3 describes these correlational analyses. As can be seen item by item and item by total correlations are consistently significant. As might be expected, item by total correlations are higher than item by item correlations. Although this is commonly found, the investigator should point out to the reader the reason for this occurrence. Factor analysis allows one to identify items that are part of a larger construct. Therefore, item by total factor score correlations are reflecting these same associations. However, in the case of Table 3, it has been done for each item. This enables the reader to independently assess each item in each factor. Returning to item by item correlation it should be noted that the ideal case is to have significance between each item in a given factor which is a measure of internal consistency. But one does not want excessively high correlations, in that each item should not only correlate with each other as well as with the total score but also offer some uniqueness to the larger construct.

An additional assessment of construct validity is found in Table 4. This table includes a comparison of item by total factor score correlations and item by scale score correlations for several additional criterion scales. As the reader can see items correlate higher with their own total than with totals of the additional factors. Likewise, Factors 1 and 3 (romantic scale items) correlate higher with each other than with Factor 2 (conjugal items). This provides additional support for the assumption that Factors 1 and 3, although measuring certain unique aspects, are measuring two constructs (attitudes) which are somewhat related.

Table 3
Inter-item Correlations for Factors 1, 2, and 3

1	2	3	4	5	6	7	8	9	T	
Factor 1--Romantic Idealism *										
1	1.00	.22	.18	.22	.41	.37	.23	.27	.17	.55
2		1.00	.17	.31	.31	.27	.31	.34	.33	.58
3			1.00	.34	.21	.28	.20	.29	.30	.52
4				1.00	.36	.34	.32	.35	.37	.65
5					1.00	.27	.31	.27	.20	.63
6						1.00	.33	.44	.34	.65
7							1.00	.33	.23	.63
8								1.00	.36	.66
9									1.00	.56
Factor 2--Conjugal Rational*										
1	1.00	.21	.06**	.13	.18	.17	.22	.18		.50
2		1.00	.25	.27	.26	.38	.24	.26		.63
3			1.00	.14	.10	.14	.20	.33		.46
4				1.00	.19	.23	.25	.20		.55
5					1.00	.17	.12	.22		.54
6						1.00	.30	.24		.58
7							1.00	.29		.60
8								1.00		.60
Factor 3--Romantic Power*										
1	1.00	.27	.30	.31	.20	.21	.28	.20	.21	.59
2		1.00	.22	.16	.12	.21	.17	.19	.21	.52
3			1.00	.50	.18	.17	.27	.22	.18	.63
4				1.00	.25	.15	.27	.19	.23	.62
5					1.00	.25	.32	.13	.25	.50
6						1.00	.25	.16	.21	.50
7							1.00	.28	.39	.63
8								1.00	.29	.51
9									1.00	.56

*Significant at .05 level.

**Not significant

Note: Actual content of items can be found in Table 3.

Table 4

Item by Total Correlations

	Total Factor 1	Total Factor 2	Total Factor 3	Total Knox & Sporakowski	Total Rubin	Total Driscoll et al.	
Factor 1							
Romantic	1	.55	-.01	.24	.03	-.10	.08
Ideal	2	.59	.10	.21	-.01	-.03	.03
Factor	3	.52	.16	.24	.02	-.07	.03
	4	.65	.22	.31	.01	-.06	.07
	5	.63	.05	.35	.07	-.05	-.06
	6	.65	.15	.35	.08	-.03	.01
	7	.62	.24	.45	.02	-.10	-.08
	8	.66	.12	.37	.03	.05	-.04
	9	.56	.25	.27	.03	-.05	-.01
Total	1.00	.23	.53	.06	-.08	-.03	
Factor 2							
Romantic	1	.08	.50	.02	-.10	.01	-.05
Power	2	.11	.63	.17	.07	.02	-.01
Factor	3	.15	.43	-.01	.10	.01	.04
	4	.20	.55	.15	.08	.03	.11
	5	.30	.54	.28	.02	-.02	.01
	6	.03	.58	.11	.03	-.03	.01
	7	.02	.50	.01	.02	.03	-.01
	8	.09	.51	.07	.02	-.02	.02
Total	.23	1.00	.20	.05	-.01	.02	
Factor 3							
Conjugal-	1	.36	.25	.59	-.05	-.14	.05
Rational	2	.27	.09	.52	-.01	-.07	.07
Factor	3	.42	.21	.63	.05	-.03	-.04
	4	.40	.24	.62	.03	-.04	-.10
	5	.18	.10	.50	-.02	-.12	-.01
	6	.24	.03	.50	.01	-.09	.05
	7	.27	-.01	.63	.11	-.10	.03
	8	.25	.06	.51	.07	.08	.02
	9	.23	-.01	.56	.07	.01	-.02
Total	.53	.20	1.00	.06	-.01	.01	

Note: In addition, it was found that Rubin and Know correlated $-.01$, Rubin and Driscoll et al. $.01$, and Knox and Driscoll et al. $.06$.

Surprisingly, none of the new factor scales correlate in the expected direction with previously used love scale totals. This particular phenomenon is rather hard to account for. However, again to our surprise, Rubin, Knox and Driscoll's scales were also uncorrelated. An examination of the items in each of these scales may account for the failure of the scales to correlate with each other. First, Rubin's scale appears to be measuring a giving-needing dimension which is probably one minor dimension in the total construct of romantic love. On the other hand Knox's scale appears to be summing a number of related yet different constructs under one score total (Adams & LaVoie, 1974; Hinkle & Sporakowski, 1975). Therefore, failure to find a correlation between the new factors and the Knox total scale score may in part be due to the fact that multiple dimensions have been disguised under a unidimensional framework. Furthermore, failure to correlate with Driscoll's scale was anticipated for some scale items since trust should more realistically be expected to fall somewhere in-between a romantic and conjugal orientation.

In summary, Pilot 1 provided initial support for construct validity of factor scales which have been described as romantic and conjugal in perspective. Inter-item correlations and item by total correlations provided relatively strong support for internal consistency. However, little support could be found for concurrent validity with previously used scales. Therefore, the investigator has completed two additional pilots to establish predictive validity, i.e., the ability to differentiate criterion groups via one or more factor scales.

Pilot 2. In the first of two experiments 30 college students were asked to assume the role of an engaged person while an additional 30 were asked to assume the role of a married person with children. Following what was believed to be appropriate responses for these criterion groups, subjects responded to the three new factor scales. Participants in the engaged group were expected to show higher romantic scores than those in the married group. Further, the married group was expected to show higher conjugal scores than the engaged group. As the reader can observe in Table 5, data supported these assumptions.

Pilot 3. One might argue that pretending to assume a role might result in different responses than actually living such a role. Therefore in Pilot 3, three separate groups were contacted; engaged, married and divorced persons. Divorced individuals were included because it was assumed that the trauma of divorce would lead one to become even more realistic about love attitudes. Table 5, includes the mean groups comparisons for Pilot 3 data. As can be seen, engaged persons were significantly more romantic on both factors than married or divorced persons. In contrast both divorced and married persons were significantly more conjugal in their love attitudes than were engaged individuals. Although nonsignificant, divorced persons were more conjugal in their attitudes than married persons.

In summary, data from Pilots 2 and 3 have demonstrated that the romantic and conjugal factors that were developed in Pilot 1 have the sensitivity to differentiate between two or more groups based upon marital status.

Table 5

Mean Comparisons on Data for Pilot 2 and Pilot 3

	n	Mean	Standard deviation	n	Mean	Standard deviation	t-Test	df	2-tail problem
				Pilot 2					
	Engaged role			Married role					
Romantic ideal	(30)	41.53	5.05	(30)	34.00	5.91	5.29	58	.001
Romantic power	(30)	31.90	7.72	(30)	24.93	6.20	3.85	58	.001
Conjugal-rational	(31)	31.60	6.39	(30)	37.87	6.49	3.77	58	.001
				Pilot 3					
	Engaged persons			Married persons					
Romantic ideal	(25)	43.40	5.05	(25)	32.52	5.65	7.18	48	.001
Romantic power	(25)	34.36	6.96	(25)	21.52	6.51	6.74	48	.001
Conjugal-rational	(25)	35.84	6.00	(25)	39.04	4.55	2.13	48	.04
				Pilot 3					
	Engaged persons			Divorced persons					
Romantic ideal	(25)	43.40	5.05	(15)	33.07	5.61	6.01	38	.001
Romantic power	(25)	34.36	6.96	(15)	20.47	4.03	7.03	38	.001
Conjugal-rational	(25)	35.84	6.00	(15)	41.13	6.59	2.60	38	.02
				Pilot 3					
	Married persons			Divorced persons					
Romantic ideal	(25)	32.52	5.65	(15)	33.07	5.61	.30	38	.77
Romantic power	(25)	21.52	6.51	(15)	20.47	4.03	.56	38	.53
Conjugal-rational	(25)	39.04	4.55	(15)	41.13	6.59	1.19	38	.29

Sample

Residents of Calgary, Alberta, Canada were solicited as volunteers in the present study. Two different samples were drawn from various sectors of the Calgary population. One group consisted of individuals who terminated their education at the close of junior or senior high school. The second group consisted of individuals who attended college from three to eight years. In addition, the samples were also divided into four subgroups.

For the high school educated sample there were 60 high school students (25 males and 35 females), 52 individuals who were married but had no children (25 males and 17 females), 72 persons who were married and had children in the home (30 males and 43 females), and 52 married persons whose children had grown-up and left home (26 males and 26 females). For the college educated sample, there were 24 singles (13 males and 11 females), 24 married with no children (14 males and 10 females), 24 married with children (12 males and 12 females), and 20 married individuals whose children had left home (10 males and 10 females).

Procedure

Participants were solicited as volunteers throughout the city of Calgary. Initial contacts were made through church organizations, friends, acquaintances, and relatives of the investigator. Volunteers were interviewed in private in their homes located throughout Calgary.

Subjects were asked to complete several questionnaire scales. These scales included the Valecha and Ostrom (1974) measure of locus of control (an abbreviated version of the measure reported by Rotter, 1966), Rubin's (1970) and Knox's measures of romantic love, and the scales explicitly designed during the previously discussed pilots which measure two dimensions of romantic love and one overall dimension of conjugal love attitudes.

Results

Scale Comparisons

Recently, Dion and Dion (1976) have vividly reminded us about the process of validation of research instruments. These researchers have remarked:

No single study (or pair of them) fully establishes, once and for all, a construct's validity. Rather, claims to construct validity become more credible as the frequency of successful, independent tests with diverse criteria increases. (p. 187)

Therefore, our first analyses were completed to establish further evidence for concurrent validity between the instruments used.

First, a correlation matrix was established between the romantic scales (Table 6). The question that such an analysis was designed to answer had to do with the concurrent validity between romantic scales. An examination of the correlations in Table 6 reveals that all romantic scales are significantly correlated for the high school educated group, although certain correlations between scales were indeed low. In comparison, for the college educated group certain correlations were not only nonsignificant but one was even negative. This suggests that romantic love scales should not be indiscriminately used in comparing heterogeneous samples.

When using a total score for Knox's scale, its correlation with Rubin's Love Scale was either low or negative, implying that these two total score scales are not measuring similar constructs. The Knox

Table 6

A Check on Concurrent Validity Between Romantic Scales

	Rubin	Knox	Idealism	Power
Rubin's Love Scale	--	.18*	.42*	.36*
Knox's Attitude Toward Love Scale	-.17*	--	.16*	.41*
Romantic Idealism Scale	.05	.38*	--	.53*
Romantic Power Scale	.41*	.05	.54*	--

Note: Right hand matrix contains the correlations for the high school educated sample. Left hand matrix contains the correlations for the college educated sample.

*Significant at the .05 level.

scale does correlate, however, with the new Idealism scale in both samples, but once again ranging from low to modest in relationship to each other. Furthermore, for the high school sample only, Knox's scale correlated with the new Power Scale. In comparison Rubin's scale correlated modestly with both the Idealism (high school sample only) and Power scales (both samples). The strongest relationship was found for the new Idealism and Power scales across both samples.

These data imply that the strongest concurrent association between instruments were for the relationship between the new scales and Knox and Rubin's instruments. However, the latter two seem to be measuring differing constructs. This issue will be addressed again in a later analysis.

The next question has to do with discriminant validity. That is, is there evidence suggesting that romantic attitudes are different from conjugal love preferences. There is no available evidence which suggests that one attitude precludes or negates the other. However, it is assumed by most theorists that one of the two attitudes would dominate an individuals' attitude/value system. Therefore, it would be assumed that correlations between romantic and conjugal love scales would be at best modest. Table 8 summarizes the relationship between total scores on romantic scales as they relate to the new conjugal scale. As can be seen, correlations are consistently modest to low, and in one case negative, with the exception of the relationship between Idealism and Conjugal constructs. This relationship may have been a spurious one, or it may be implying that a certain degree of romantic idealism covaries with conjugal love preferences.

Table 7

The Association Between Romantic and Conjugal Love
 Scale Totals: A Case for Discriminant Validity

	Conjugal Love Scale		
	College	High School	Average
Rubin's Love Scale	-.25*	.18*	-.07
Knox's Attitude Toward Love Scale	.39*	.11	.25*
Romantic Idealism	.57*	.15	.36*
Romantic Power	.33*	.25*	.29*

*Significant at the .05 level.

Table 8

A Comparison of Romantic and Conjugal Love Attitudes Using
Subfactors of the Knox Love Attitude Inventory

	Three Subfactors of Knox's Scale					
	High School			College		
	Traditional	Overcomes All	Ir- rational	Traditional	Overcomes All	Ir- rational
Conjugal	.10	-.03	.08	.02	-.02	-.04
Idealism	.18*	.01	.14*	.25*	.09	.21*
Power	.41*	.30*	.35*	.50*	.41*	.43*
Rubin	.29*	.05*	.23*	.28*	.09	.23*

*Significant at the .05 level.

Certain inconsistencies have been found in both Tables 6 and 7. In particular, Knox's scale showed a sporadic relationship with the other romantic constructs. This particular finding may be accounted for by the recent work of Hinkle and Sporakowski (1976). These investigators have shown that Knox's scale, in actuality, consists of three subfactors which they have called Traditional Love--One Person, Love Overcomes All, and Irrationality. Therefore, in our quest for establishing concurrent validity through a convergent/discriminant validation strategy (Campbell & Fiske, 1959) one might expect somewhat different findings when the Knox scale is scored according to sub-scales and then correlated with the additional scales administered in this investigation.

Table 8 reveals several clarifying findings. Foremost, the three subfactors of the Knox scale are not correlated with the new Conjugal scales suggesting the ability to discriminate conjugal from romantic love preferences. The new Idealism score was found to be associated with Knox's Traditional Love and Irrationality measures, suggesting that the new scale measures idealism, traditionalism, and irrationality in one scale structure. The strongest convergence was found between the new Romantic Power scale and the Knox instrument. The consistent relation between this scale and the three subscales of Knox's instrument suggest that the Power scale is measuring an overall romantic love orientation. Finally, Rubin's scale appears to be measuring some form of romantic traditional love preference with an irrational element in it. Therefore, one can conclude that Rubin's scale, the new Idealism scale, and the subscale of Traditional love and Irrationality of Knox's instrument are measuring a similar construct. In comparison, the new Romantic Power Scale appears to be measuring an overall estimate of the importance of romantic attitudes for the individual. And we might also conclude that the discriminant validity assessments suggest that the new Conjugal love scale is only modestly related to romantic attitudes.

Objective 1

The first objective was to assess the effects of differing stages of life on previously reported developmental trends in attitudes of love. The basic assumption was that each stage of life consists of specific developmental tasks and responsibilities which are likely to

affect one's attitudes. Therefore, two independent samples were examined for the presence of developmental stage-age related trends.

College educated sample. A multivariate analysis of variance was completed using a Sex X Stage of Life X Internal/External Personality factorial. One significant main effect for stage of life ($F=10.23$, $df=3.76$, $p<.01$) was found on the new Romantic Power measure. Simple effects comparisons using the "honest significant difference" technique revealed that each stage of life was significantly different from the next. Figure 1 demonstrates over stage and age that there is an overall trend toward increasing belief in the powerfulness of love. However, a significant digression from the overall pattern was found between the two middle stages, i.e., individuals who were married with children were less likely to believe in the power of love than newly married couples, but were still more inclined to believe in it than nonmarried single persons. No other significant differences were disclosed for the college sample on romantic and conjugal love attitudes.

High school educated sample. Once again, the multivariate analysis of variance was completed on all romantic and conjugal scale responses. Significant stage differences were found for four of the five measures. The importance of romantic power was once again revealed ($F=9.14$, $df=3,220$, $p<.01$) in the high school students, young marrieds, and couples with children did not differ in their attitudes, rather each of these groups were significantly different from the married couples whose children have grown up and left home (see Figure 1).

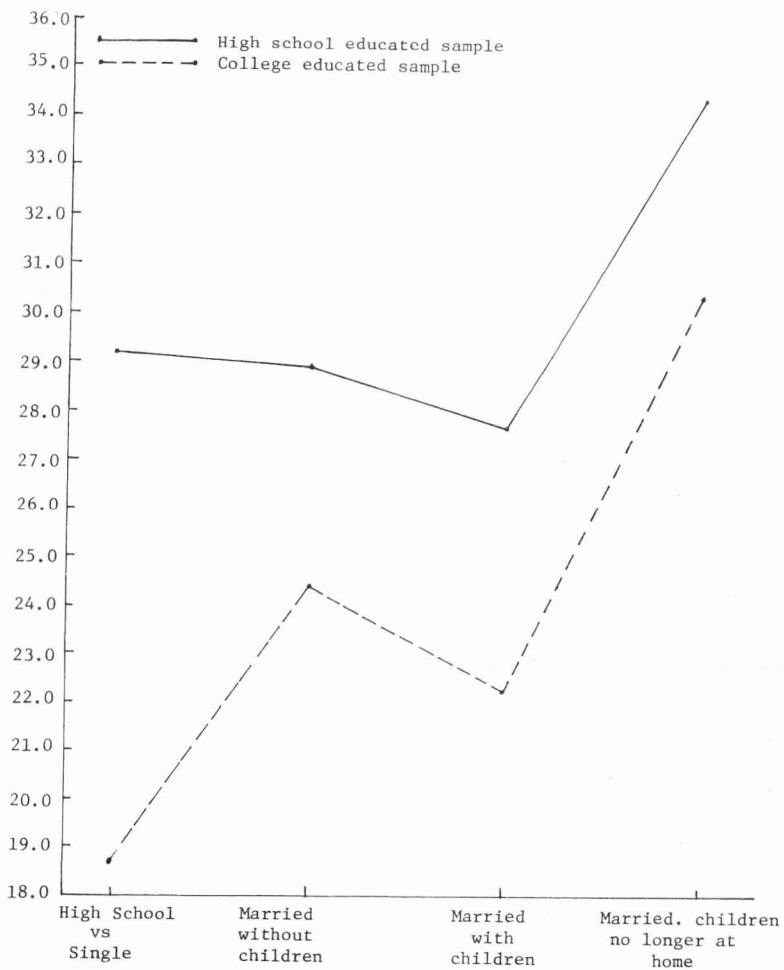


Figure 1. A comparison of the two samples' mean scores for four stages of life on the measure of Romantic Power.

The stage comparison using Rubin's Love Scale revealed a significant overall trend ($F=6.88$, $df=3,220$, $p<.01$) toward increasing belief in the importance of giving, needing, and interpersonal confidence in one's partner. Each stage was found to be significantly different from all others. Further, a significant decline from the period of early marriage to the time when marriage included children was found on this scale (see Figure 2).

Following what Knox (1970a, b) has previously reported, a curvilinear trend was revealed for the group comparisons on his instrument (see Figure 3). However, there was no significant differences between high school students, young marrieds, and married with children as Knox's previous work would suggest. Rather, it was the married couple's with children who have left the home who were the most romantic in their attitudes. Furthermore, it should be noted that the high school students were significantly less romantic than the older married--this is contrary to Knox's previous work.

Finally, a significant linear trend ($F=11.36$, $df=3,220$, $p<.01$) in the development of conjugal love attitudes was also found. Simple effects mean comparisons revealed that high school students and young couples were the least conjugal and did not differ in their attitudes, however, with each additional progress stage in life conjugal attitudes significantly increased (see Figure 4).

Objective 2

The second objective was to investigate the potential mediating effects of personality on the development of attitudes toward love.

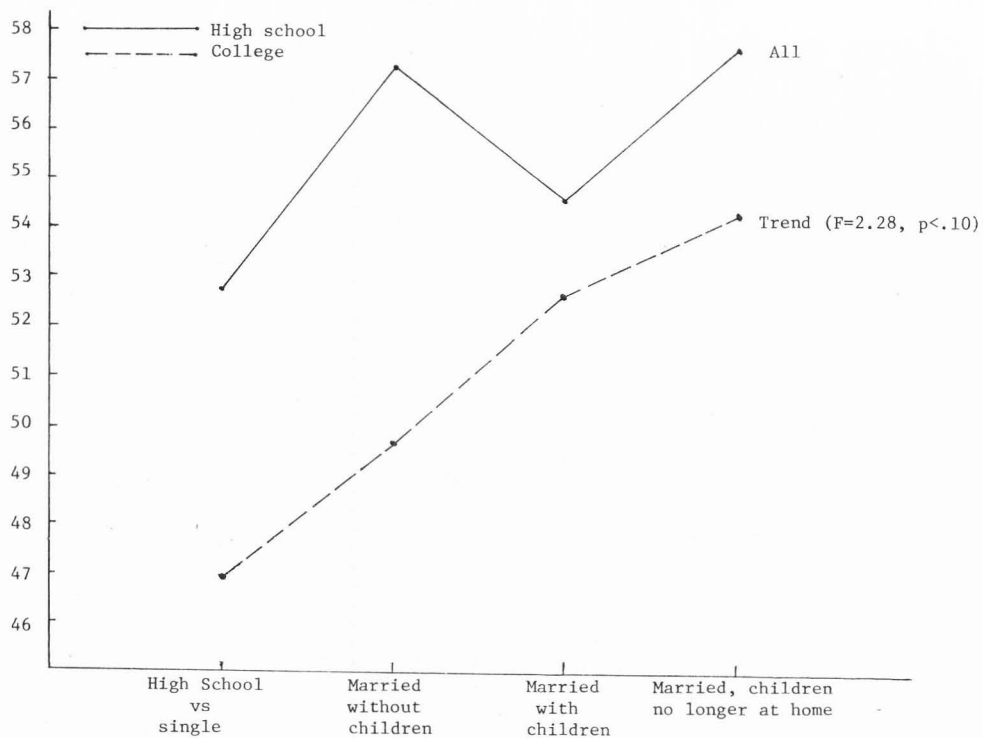
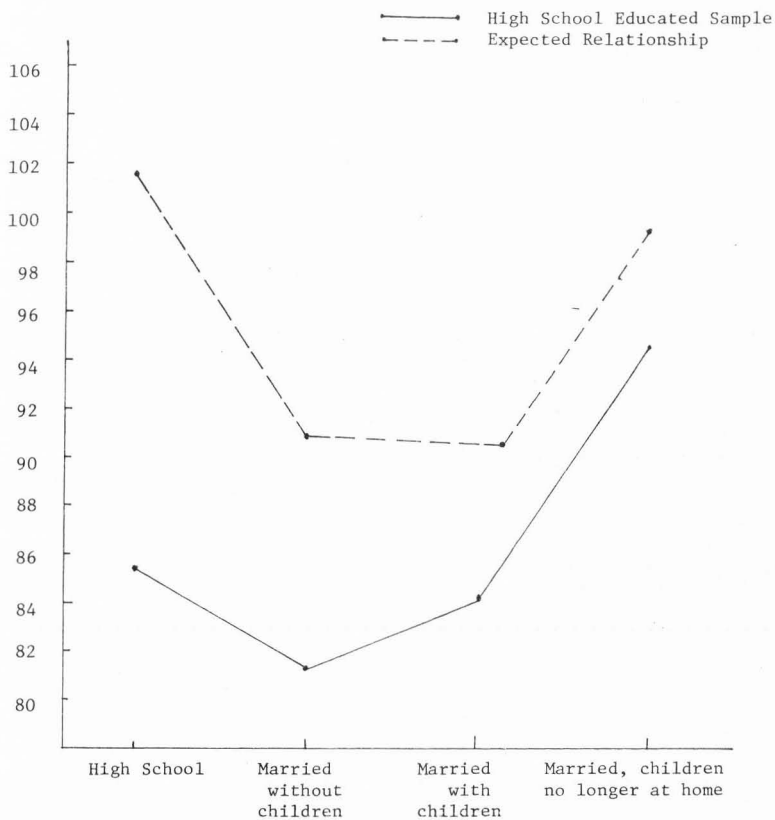


Figure 2. A comparison of the two samples' mean scores for four stages of love on the Rubin Love Scale.



Note: The dotted figure represents the hypothetical relationship expected by Knox (1970).

Figure 3. A comparison of high school sample's mean score on the Knox Love Attitude Inventory.

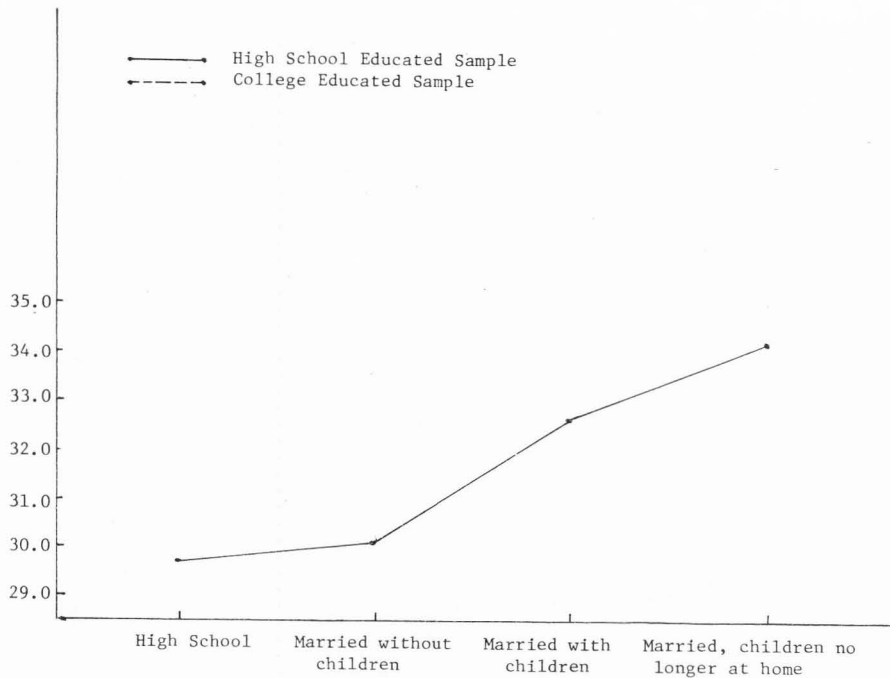


Figure 4. The high school sample's mean score for four stages of life on the measure of Conjugal love.

Following Dion and Dion's (1973) previous work it was expected that individuals who reported internal personalities would be less romantic in their attitudes than individuals with external personality types.

College educated sample. A nonsignificant trend ($F=3.71$, $df=1,76$, $p<.10$) revealed that regardless of sex or stage of life, college educated persons who were internal were less romantic (Mean = 71.73, $sd = 18.17$) than externals (Mean = 121.70, $sd = 18.18$) on the Knox Scale. However, no additional differences were found on the remaining instruments.

High school educated sample. No significant differences were found between internals and externals on romantic measures for this sample. Rather, on the Conjugal scale ($F=19.98$, $df=1,220$, $p<.01$) internals (Mean = 33.01, $sd = .42$) were more conjugal than externals (Mean = 30.29, $sd = .42$) in their attitudes toward love.

In addition, two significant second order interactions were found between locus of control and stage of life. Figure 5 depicts the significant ($F=3.03$, $df=3,220$, $p<.01$) interaction effect on the new Romantic Idealism scale. As can be seen for both the external and internal groups there are major changes over stages of life. First, it should be noted that externals are more idealistic than internals at the high school stage, but no differences were found for the comparisons of internal-external groups at the three remaining stages. Rather, a trend emerges for both personality types wherein internals and externals emerge on the same general degree of idealism during the courtship and young marriage stage, show significant declines in idealism during the child-rearing stage of marriage, and return to a high degree of idealism during the later stage.

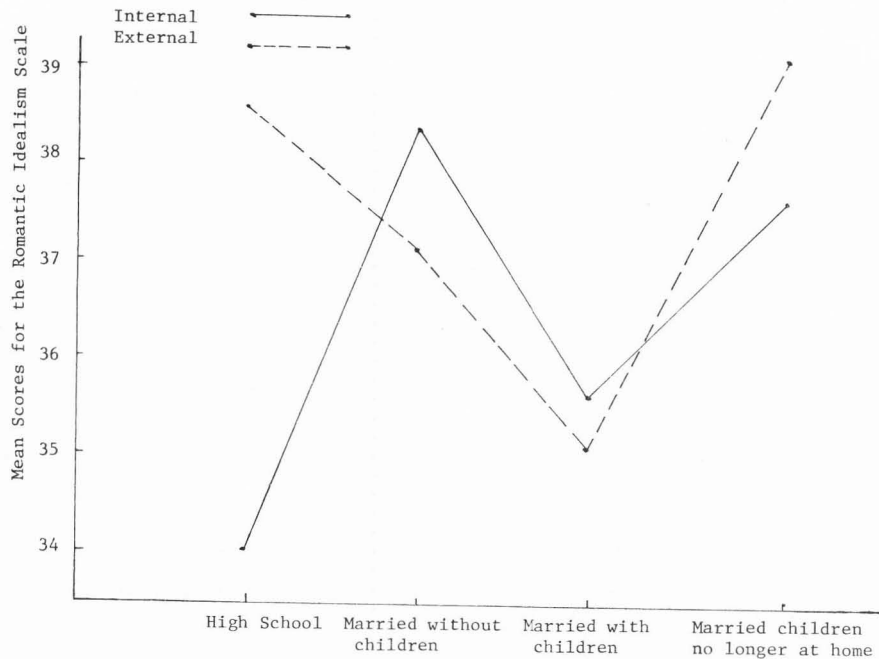


Figure 5. A comparison of internal and external persons' mean scores on the Romantic Idealism Scale for high school educated sample.

Figure 6 depicts a similar trend ($F=5.14$, $df=3,220$, $p<.01$) for the Rubin Love Scale data. Once again, externals were more romantic than internals at the high school stage. Further, no significant differences were found between the two comparison groups for the young couple, and childrearing stages, however, internals were more romantic than externals during the later stage of life. Interestingly, internals become somewhat more romantic during the couples period, drop slightly during childrearing and increase their romantic attitudes during the later years. A similar trend across stages was found for externals, however, the only significant stage change was between the couples and married with children periods.

Objective 3

Given that several previous investigations have reported sex differences in attitudes toward love the present study attempted to specify these differences in more detail.

College educated sample. The only significant sex difference was found on the Idealism scale ($F=5.10$, $df=1,76$, $p<.05$). Females (Mean = 34.82, $sd = 1.32$) were more idealistic than males (Mean = 30.57, $sd = 1.32$). No other group differences, including interactions, were significant.

High school educated sample. No significant sex differences were found for this sample.

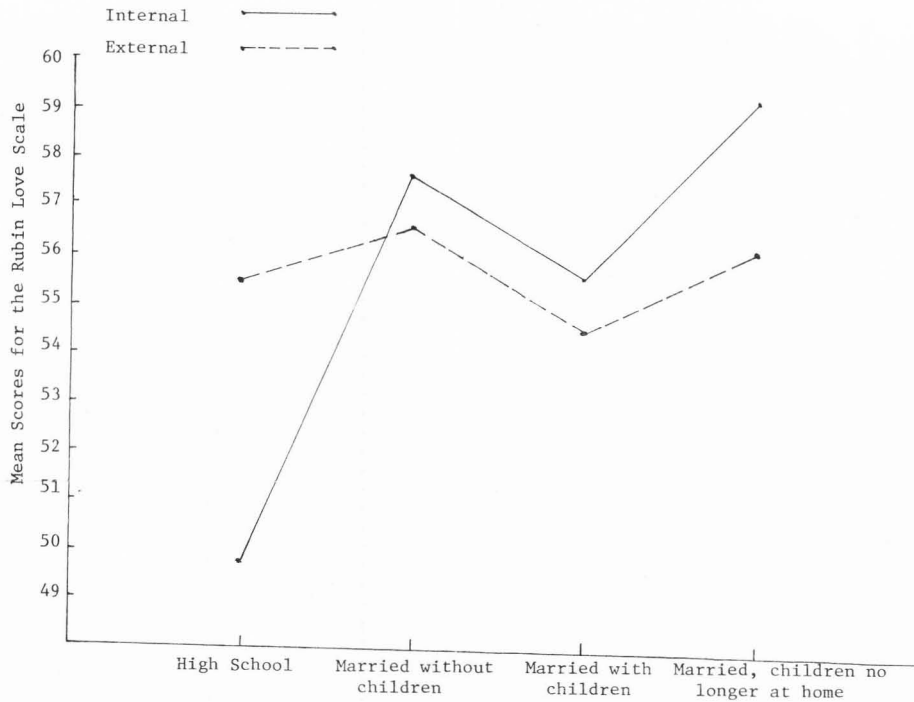


Figure 6. A comparison of internal and external person's mean scores on the Rubin Love Scale for the High School Educated sample.

Objective 4

The final objective was to assess the effects of education on the developmental trends over stages of life. Given that social class covaries with education, the two are seen as being naturally confounded in the present investigation.

College versus high school samples. Table 9 contains mean comparisons of the two samples for all measures. Consistently, across all romantic scales the high school educated sample was more romantic than the college educated sample. However, no differences between the groups were found on the conjugal scale.

A comparison across stages. As can be seen in Figure 1 the high school educated group was found to be more inclined to believe in the powerfulness of romance across all stages than the college educated sample. However, the significant decline in this belief for the educated group when children appeared in the family was not found for the high school educated sample. Rather, the general belief was maintained over the first three stages with only a slight decline in the third stage. Further, both groups showed a sharp increase from stage three to four.

A similar but quantitatively different pattern emerged with the Rubin Love Scale data. Liberty has been taken for comparative purposes and a nonsignificant trend for the college educated sample has also been plotted on Figure 2. For both samples a general increase in response to the Rubin scale can be seen. However, for the high school educated group peak scores were found for the stages where couples

only were present. Once again, children had a negating effect on romantic scores, but in this case only for the high school educated sample.

Once again, in Figure 3, for clarification purposes a general curve which would be expected according to Knox's (1970a, b) research was outlined. Although the curve outlined from the data in this investigation approximates the hypothetical curve, expected significant differences were not found between the youngest and oldest groups, and the youngest and middle groups.

On the measure of conjugal love (see Figure 4) an age/stage related linear trend in the development of conjugal love was found for the high school sample. However, no such stage development was found for the college educated sample--rather, for this group, conjugal love preferences are relatively fixed or stable over the course of life stages.

Table 9

Mean Comparisons of the Two Independent Samples on Romantic
and Conjugal Love Attitudes

	Degree of Education			
	College Sample		High School Sample	
	Mean	Sd	Mean	Sd
Romantic Idealism Scale	36.45 ^a	9.64	41.10 ^a	6.31
Romantic Power Scale	26.58 ^b	10.53	33.37 ^b	8.16
Conjugal Love Scale	38.34	5.72	39.77	6.30
Rubin's Love Scale	39.79 ^c	8.74	42.91 ^c	5.25
Knox's Love Attitude Inventory	24.91 ^d	5.88	28.67 ^d	5.88

Note: All means sharing a common superscript are significant at the .05 level or better.

Discussion

The results of this investigation have provided further clarification about love attitudes. Developmental differences in attitudes about love were found between internals and externals, across life stages, and between college and high school educated groups. Various reasons may be given for these differences.

Developmental differences were found between the high school and college samples. The college sample was consistently less romantic while the high school sample fluctuated sharply with digressions from highly romantic attitudes and progressions back to romantic conceptions. Thus a curvilinear relationship was found for the High School sample. Differences in the developmental patterns of these two samples may be attributed to educational differences. The college educated individuals are probably taught to be more cognitive than affective thus causing them to exhibit less faith in romantic affective attitudes. However, for the high school educated sample digression from romantic attitudes was found when children were in the home and a sharp rise in romantic attitudes when children were no longer present. Hence it would seem that competing stimuli (children) within the family initiates lower romantic attitudes for the high school sample. But why not for the college sample? The answer may lie in the assumption that a college education is associated with a higher socioeconomic status. If this is true it would mean that the college educated parents would be more

financially secure enabling them to hire child care support, personal allowing them time to themselves. Thus children would not seem quite as demanding or time consuming. Another assumption, as discussed earlier would suggest that the college sample was possibly never extremely romantic therefore a drop in romantic attitudes when children were present would not be noticeable.

Holding educational level constant in the present study allows one to view stages and correlates of stages independent of educational level. Regarding education shaping beliefs, Knox (1970a), and Knox and Sporakowski (1968) have attributed their resulting curvilinear relationship to differential levels of education. It was assumed that high school students would be more romantic due to low educational level, young married would be less romantic because they are more educated and individuals married 20 or more years would be more romantic because they would probably have less education. Mean comparisons of college and high school samples in the present study suggest that high school educated individuals are significantly more romantic than college educated individuals. However in comparing stages the present high school educational level was held constant. An assumption which may quite legitimately be made is that correlates of stage may also affect ones conception of love. In this study the correlate taken into consideration is the presence or absence of a child within the family setting. It may be the effects of rearing children and the energy and time that is assumed during this task that accounts for a reduced romantic attitude. Therefore, high romantic beliefs during adolescence

and young adulthood may be due to "idealism" of youth, however, child rearing years are likely to make one a pragmatist, while the later years may be a period of sentimentalism or "defensive forgetting."

Knox (1970a, b) and Knox and Sporakowski (1968), dealt with only three stages of development rather than the four used in the present study, perhaps explaining why he found young marrieds to be low in romantic attitudes. Division of young married couples into two stages as opposed to one stage, discriminated between young married couples with and without children. Subsequently this division seems to indicate that the decisive factor is not marriage but rather presence or absence of children within the home. Quite logically most of the instruments infer less romantic attitudes towards love around the busy child rearing years.

Further clarification and enlightenment was found for Knox's assumption that a decrease in romantic attitudes infers an increase in conjugal love attitudes. Information received through the Conjugal Love Scale makes it apparent that a realistic (conjugal) view of love for the high school sample is a progressive growing entity (a linear progression) while the college sample is consistently conjugal across the stages. Emphasis placed upon the college educated individual to be cognitive rather than affective may explain this inconsistency. College students are taught that feeling is not as important as thinking and being rational therein setting the stage for a consistent conjugal attitude toward love. Conversely various situational learning experiences over time may be the basis upon which the high school population

builds conjugal love attitudes. New situations and experiences arise over time thus producing a linear progression in conjugal attitudes. For example, goal setting, child-rearing and planning of time together may act as situations promoting conjugal attitudes. This suggests that conjugal or realistic love attitudes are the product of learned cognition (consistent with Driscoll, Davis & Lipetz, 1972) while romantic love attitudes seem to thrive when the couple or individuals have less competing stimuli (e.g. children). Thus it may be implied that love attitudes (romantic or conjugal) are not necessarily mutually exclusive but may rather exist simultaneously. Therefore the finding that Stage four individuals (married children no longer at home) score high on both romantic and conjugal items is not inconsistent with what might be expected. Thus it seems that attitudes about love (conjugal or romantic) may at times covary as has been suggested by Adams and LaVoie (1974) and Driscoll, Davis and Lipetz (1972).

Internal or external locus of control also appear to affect one's conception of romantic love. Consistent with the research of Dion and Dion (1973), adolescents in Stage one of the present study tended to differ greatly depending upon their locus of control. Internals on both the Idealism and Rubin Love Scales scored low thus implying a view of love which is less mysterious, idealistic and volatile. Conversely the external adolescents scored very high on these instruments thus conferring a more idealistic and volatile view of love. However this is the only group which Dion and Dion (1973) studied thus leaving the picture unclear as to how other stages of development might compare to this initial stage.

Externals of the second stage (young marrieds) remained at relatively the same level of romantic conception while the internals became much more romantic in their attitudes. Stage three (married with children) exhibits a significant drop in romantic attitudes for both groups followed by a significant rise in romantic attitudes in stage four (married with children no longer at home). Thus the individuals of the two personality types in stage one are significantly different from one another but they begin to covary over stages two, three, and four. Convergence of trends however does not necessarily infer the same purpose for actions. By definition internals view events which affect them as being under their personal control. Externals on the other hand see themselves as not in control of events affecting them, rather these events are a result of powerful external forces such as luck or fate (Rotter, 1966; 1967). Therefore, the internal adolescent would not be romantic but as a newly married spouse the internal may feel a responsibility to make the other happy, perhaps through romantic attitudes. When children are brought into the home the internal's responsibility would shift to being an effective parent. However, when children are no longer in the home the responsibility would once again be directed to pleasing one's spouse thus involving more romantic attitudes. Conversely, the external is pushed by forces around him. As an adolescent the romantic love themes perpetuated in songs, movies and the mass media possibly encourage the external to adopt romantic attitudes. The forces for the external become the spouse in stage two, the children in stage three, and the spouse once again in stage four. Thus, it is

conceivable that the internal is more or less romantic in his conception of love due to responsibility while the external's changes are due to forces which manipulate him.

Although there were noteworthy developmental trends in the present investigation there are certain weaknesses in the design used in this study. Cross-sectional designs are biased by such factors as selective sampling and selective survival (Baltes, 1968). In particular, past research has indicated that the last stage of family life used in the present investigation is most prone to sampling error due to selective survival and age related changes (e.g. social desirability increases with age, Ahammer, 1970; Ahammer & Baltes, 1972). Baltes (1968) also points out that there are age-related as well as cohort-related differences over time. This means that age and cohort may be confounded in this study. Thus as age has not explicitly been taken into consideration there is some question as to whether cohort or age differences are being evaluated. Cross-sectional research deals with individual differences of separate stages or cohorts. Thus what is being measured are separate stages which may be effected by historical or cohort effects. From these individual differences of stages or cohorts intraindividual change is inferred which may or may not be an appropriate assumption to make.

Clearly the solution to these methodological problems is to conduct a longitudinal study. A longitudinal study would follow individual couples across the stages in an attempt to assess whether a curvilinear pattern is found in intraindividual development. However the feasibility of following a couple through their entire family career

is low, thus the most appropriate methodology to use would be the short term longitudinal sequential design (Baltes, 1968). This design was followed roughly by Driscoll, Davis and Lipetz (1972) in which couples are observed for 8 to 10 months. However, one further variation which may be implemented would be to observe individuals as they leave one stage and begin another. Thus an adolescent would be observed just prior to marriage and until the tenth month of the marriage, a couple having a baby would be observed until the child is 10 months old and a couple who's last child is getting married would be observed until that child has been married for 10 months. This would render stage differences and yet would be less time consuming.

The problem created by a cross-sectional design of research is related to the problem which has arisen in the marital adjustment literature. In general the marital adjustment literature (Lang, 1953; Bossard & Boll, 1955; Rollins & Feldman, 1970; Rollins & Cannon, 1974) has presented much of the same type of curvilinear relationship as research on love. Many researchers have found a decline in varying degrees of marital adjustment during the childrearing years followed by a progressive rise. If both the adjustment literature and the love literature is correct it could indicate an inter-correlation. But as Spanier, Lewis and Cole (1975) point out there is a need for longitudinal study to avoid problems created by cross sectional research.

The substantive findings of the present study provides support for curvilinearity across the stages for the high school sample. Results support the finding that internal or external locus of control

and educational level affect one's conception of love. However, tests should not be used indiscriminantly and other methodology designs should be considered. The present study accentuated the realization that many of the traditional methods of assessing development are weak. This study then is an indication of what in fact may be, but further short-term longitudinal sequential study is needed in order to verify the findings.

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Appendix

Knox Love Attitude Inventory (Knox, 1970)

- | | | SA | MA | U | MD | SD |
|--|----------------------|----|----|---|----|----|
| 1. strongly agree | 4. mildly disagree | | | | | |
| 2. mildly agree | 5. strongly disagree | | | | | |
| 3. undecided | | | | | | |
| 1. Love doesn't make sense. It just is. | | 1 | 2 | 3 | 4 | 5 |
| 2. When you fall head-over-heels-in-love, it's sure to be the real thing | | 1 | 2 | 3 | 4 | 5 |
| 3. To be in love with someone you would like to marry but can't is a tragedy. | | 1 | 2 | 3 | 4 | 5 |
| 4. hen love hits, you know it. | | 1 | 2 | 3 | 4 | 5 |
| 5. Common interests are really unimportant as long as each of you is truly in love, you will adjust. | | 1 | 2 | 3 | 4 | 5 |
| 6. It doesn't matter if you marry after you have known your partner for only a short time as long as you know you are in love. | | 1 | 2 | 3 | 4 | 5 |
| 7. If you are going to love a person, you will "know" after a short time. | | 1 | 2 | 3 | 4 | 5 |
| 8. As long as two people love each other, the religious differences they have really do not matter | | 1 | 2 | 3 | 4 | 5 |
| 9. You can love someone even though you do not like any of that person's friends. | | 1 | 2 | 3 | 4 | 5 |
| 10. When you are in love, you are usually in a daze. | | 1 | 2 | 3 | 4 | 5 |
| 11. Love at first sight is often the deepest and most enduring type of love. | | 1 | 2 | 3 | 4 | 5 |
| 12. When you are in love, it really does not matter what your partner does since you will love him anyway. | | 1 | 2 | 3 | 4 | 5 |
| 13. As long as you really love a person, you will be able to solve the problems you have with that person | | 1 | 2 | 3 | 4 | 5 |
| 14. Usually there are only one or two people in the world whom you could really love and be happy with. | | 1 | 2 | 3 | 4 | 5 |
| 15. Regardless of other factors, if you truly love another person, that is enough to marry that person. | | 1 | 2 | 3 | 4 | 5 |

	SA	MA	U	MD	SD
16. It is necessary to be in love with the one you marry to be happy.	1	2	3	4	5
17. Love is more of a feeling than a relationship.	1	2	3	4	5
18. People should not get married unless they are in love.	1	2	3	4	5
19. Most people love truly only once during their lives.	1	2	3	4	5
20. Somewhere there is an ideal mate for most people.	1	2	3	4	5
21. In most cases, you will "know" it when you meet the right one.	1	2	3	4	5
22. Jealousy usually varies directly with love, that is, the more you are in love, the greater your tendency to become jealous.	1	2	3	4	5
23. When you are in love, you do things because of what you feel rather than what you think.	1	2	3	4	5
24. Love is best described as an exciting, rather than a calm thing.	1	2	3	4	5
25. Most divorces probably result from falling out of love rather than failing to adjust.	1	2	3	4	5
26. When you are in love, your judgment is usually not too clear.	1	2	3	4	5
27. Love often comes but once in a lifetime.	1	2	3	4	5
28. Love is often a violent and uncontrollable emotion.	1	2	3	4	5
29. Differences in social class and religion are of small importance as compared with love in selecting a marriage partner.	1	2	3	4	5
30. No matter what anyone says, love cannot be understood.	1	2	3	4	5

Rubin's Love Scale (Rubin, 1970)

- | | |
|-------------------|----------------------|
| 1. strongly agree | 4. mildly disagree |
| 2. mildly agree | 5. strongly disagree |
| 3. undecided | |

		SA	MA	U	MD	SD
1. If _____ were feeling badly, my first duty would be to cheer him (her) up.	1	2	3	4	5	
2. I feel that I can confide in _____.	1	2	3	4	5	
3. I find it easy to ignore _____'s faults.	1	2	3	4	5	
4. I would do almost anything for _____,	1	2	3	4	5	
5. I feel very possessive toward _____.	1	2	3	4	5	
6. If I could never be without _____, I would feel miserable.	1	2	3	4	5	
7. If I were lonely, my first thought would be to seek _____ out.	1	2	3	4	5	
8. I would forgive _____ for practically anything.	1	2	3	4	5	
9. I would greatly enjoy being confided in by _____.	1	2	3	4	5	
10. One of my primary concerns is _____'s welfare.	1	2	3	4	5	
11. I feel responsible for _____'s well being.	1	2	3	4	5	
12. When I am with _____ I spend a good deal of time just looking at him (her).	1	2	3	4	5	
13. It would be hard for me to get along without _____.	1	2	3	4	5	

Three Factor Love Scale

- | | |
|-------------------|----------------------|
| 1. strongly agree | 4. mildly disagree |
| 2. mildly agree | 5. strongly disagree |
| 3. undecided | |

Conjugal Love Factor

	SA	MA	U	MD	SD
1. Romantic love is only temporary; it soon disappears. Most marriages require a sense of mutual sharing and compromise, rather than romantic love in order to succeed.	1	2	3	4	5
2. Love is feeling warm, close and involved, but not necessarily sexually excited.	1	2	3	4	5
3. Erotic and romantic feelings toward another are poor signs toward indicating a long and stable love relationship.	1	2	3	4	5
4. It is more important to feel calm and relaxed with the one you love rather than excited and romantic.	1	2	3	4	5
5. A decision to marry should come from serious thinking not just a feeling of love.	1	2	3	4	5
6. A successful love relationship is secure, not overtly exciting and something which has been thought out.	1	2	3	4	5
7. Jealousy does not play a part in a lasting love relationship.	1	2	3	4	5
8. Good companionship is more important than romantic love in making a good marriage.	1	2	3	4	5

Romantic Idealism Factor

1. Love is the highest goal between a man and a woman	1	2	3	4	5
2. Love is more important than any chance or opportunity for success in profession or business.	1	2	3	4	5
3. Many years of being in love deepens rather than exhausts the sense of pleasure that partners feel for each other.	1	2	3	4	5
4. One should not marry unless one is absolutely sure that one is in love	1	2	3	4	5

	SA	MA	U	MD	SD
5. Love is the most important thing in a relationship	1	2	3	4	5
6. Love is the essence of life.	1	2	3	4	5
7. A true lover would rather be deprived of all his money and of everything the human mind can imagine ...than be without love.	1	2	3	4	5
8. To live in love is more pleasant than any other way of life in the world.	1	2	3	4	5
9. Love offers an incentive to do good.	1	2	3	4	5

Romantic Power Factor

1. There can be no real happiness or success in life for those in a poor love relationship	1	2	3	4	5
2. There can be no real failure in life for those in love.	1	2	3	4	5
3. True love never dies, it surmounts all obstacles.	1	2	3	4	5
4. Strong love survives all troubles and obstacles.	1	2	3	4	5
5. If love between two people dies, if it crumbles into meaninglessness then everything is gone.	1	2	3	4	5
6. When one partner in a love relationship is weak the other must be strong.	1	2	3	4	5
7. Love is an intense flame which devours the roughness in each loved person, leaving only that which is pure and fine.	1	2	3	4	5
8. What lies ahead is important only as it will give or deny us a chance to realize our love.	1	2	3	4	5
9. Just being with the one you love takes away any worries over the future.	1	2	3	4	5

Short Form of Rotter's I-E Scale (Valecha & Ostrom, 1974)

- A.
1. Many of the unhappy things in peoples lives are partly due to bad luck.
 2. People's misfortunes result from the mistakes they make.
- B.
1. In the long run, people get the respect they deserve in this world.
 2. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- C.
1. Without the right breaks one cannot be an effective leader.
 2. Capable people who fail to become leaders have not taken advantage of their opportunities.
- D.
1. Becoming a success is a matter of hard work; luck has little or nothing to do with it.
 2. Getting a good job depends mainly on being in the right place at the right time.
- E.
1. What happens to me is my own doing.
 2. Sometimes I feel that I don't have enough control over the direction my life is taking.
- F.
1. When I make plans, I am almost certain that I can make them work.
 2. It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyway.
- G.
1. In my case, getting what I want has little or nothing to do with luck.
 2. Many times we might just as well decide what to do by flipping a coin.
- H.
1. Who gets to be boss often depends on who was lucky enough to be in the right place first.
 2. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.

I.

1. Most people don't realize the extent to which their lives are controlled by accidental happenings.
2. There is really no such thing as "luck."

J.

1. In the long run the bad things that happen to us are balanced by the good ones.
2. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

K.

1. Many times I feel that I have little influence over the things that happen to me.
2. It is impossible for me to believe that chance or luck plays an important role in my life.

Vita

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