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A study of relationship between love with depression and anxiety in married individuals

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ABSTRACT

Purpose: This study was conducted to determine the relationship between depression and anxiety with love among married peoples.

Methods: It was a post event study performed on 90 married peoples and the sample was randomly selected. Married people were invited to volunteer by calling and they were entered to study after filling consent form. Then participants were evaluated by demographic, Boston stern Norse Love, Beck Depression and Hamilton Anxiety questionnaires.

Results: Based on the performance assessment of participants a significant inverse relationship was observed between love with depression and anxiety (P<0.05) and simulated love reduces depression and anxiety.

Conclusion: Increased love was associated with reduced depression and anxiety. It seems mental disorders could be reduced by creating favorable positions for romantic sentiment in the family.

Keywords: Relationship; Love; Depression; Anxiety

INTRODUCTION

Almost all people who have experienced love are agreeing with this context that grief and sorrow is the outcome of love as well as joy and happiness. Researchers are generally in agreement that romantic love acts in accordance with two other major sensory systems. These two systems are *attachment* and *sexual desire*. However, it should be noted that these two mentioned emotional systems can also act independently of each other. Although, romantic love grows toward the attachment in most cases, sometimes this love ends by rejection from the other side. Non-mutual love so-called (unrequited love) are accompanied with pain and suffering caused by the opposite party's refusal and also, it is thought that these types have an evolutionary origin and proprietary biochemical features[1].

This love is declining and gradually terminated. Absurdity, frustration, panic, anger, depression and anxiety are all original feelings of unrequited love. Studies have shown that neurochemical changes in the brains of those who are involved with unrequited love may explain two important symptoms which are separation anxiety and abandonment rage.

Separation anxiety which is generated with panic system starts with stress system stimulation and is associated with Cortisol hormone. Short-term stress, in turn, is known as a factor to increase the dopamine level and to decrease serotonin level. These are chemicals which are used to enhance and deepen romantic relationships. Depression context also increases in this way; maybe this is the reason why people express their love along with depression and anxiety symptoms after marriage.

Love is a "universal or almost universal" phenomenon[2]. In early stages, love relates to specific physiological, psychological and behavioral indicators which can be described and reviewed by investigators. These indicators

include emotional responses such as satisfaction, intense focus on a particular person, obsessive thinking about that person, depression, anxiety, emotional dependency followed by emotional integration with the beloved and increased energy.

Universality, satisfaction mode and focused attention on love suggest that rewards and motivation systems do exist in human brain. Opportunity to learn about neural fields of imagery love is at hand for neurobiologists in order to assess the neural relationship between mental subjective status and mental imaging techniques. Both of these attachments activate special areas like common areas in the brain which coincide with areas that secrete Oxytocin and are also Vasopressin receptors. Both of them disable some common areas of negative emotions and judging by others in society[3]. Recent findings indicate that mental systems primarily are related to Dopamine enhanced activities in brain pathways. This also is associated with central Norepinephrine enhanced activities and central Serotonin enhanced activities. Other brain systems together also create a class of feelings, motivations and common behaviors of romantic love. Sometimes, emotional and mood changes leads the person to depression and anxiety which is derived from changes in the chemical compositions, increase of the enhanced central Norepinephrine and stopped central Serotonin activities[1].

Attachment to a partner is known as attachment to a companion. In addition, tranquility, security and integrity of feelings with a long-term partner exist in this type of dependency. The studies which have been conducted on animals indicate that the basic brain systems are associated with Oxytocin and Vasopressin, respectively. Each of these brain systems, play a different role in courtship, mating, reproduction and fertility[1]. However, studies prompted us to associate love with depression and anxiety and find the reasons. Therefore, the aim of the present study was to determine the amount of the relationship between love with depression and anxiety.

MATERIALS AND METHODS

The outline of this research project is post-eventual. The available random sampling has been done during 6 month since the adoption of plan. Since no similar study has been found in Iran, the sample size of 18-80 was considered for both sexes. While the study was pilot, loss of 120 participants (60 for each gender) was precipitated. The study participants were married ones who have invited through public recalling. With the consent of the (participants) patients, research examinations such as demographic, Boston Northeastern Love Scale, Beck

depression and Hamilton anxiety questionnaires were completed. The study protocol has been approved by the Ethics Committee of Payame Nour University, Tehran, Iran.

Analysis

By filling the questionnaires, the collected data was entered into SPSS software version 18 and analyzed through descriptive statistics, Pearson's correlation coefficient and t-test.

Data Collection Instruments

Love: Love was measured by the Boston Northeastern Love Scale questionnaire. Love was determined with the help of a sample of 220 university students "Norse Stern" (19 to 24 ages). In doing so, the students were asked to say: "they are certainly in love", "they are most likely in love", "they are less likely in love", "certainly they are not in love" and "they are not most likely in love". After that, they were asked to answer the love measure questions in relation with the one who are in love with. There was no difference in the outcome of boys and girls. The score of 84 means that your feelings belong to the group who said "we are certainly in love", "we are most likely in love"[4].

Depression: By using the beck depression questionnaire, the status of depression was examined. The test contains 21 questions in which sadness, pessimism, dissatisfaction, impaired decision-making, self-hatred and isolation are discussed. The minimum and maximum scores are zero and 63 [5].

Anxiety: Anxiety was evaluated through Hamilton anxiety questionnaire. Currently, Hamilton anxiety questionnaire is the best known test to assess anxiety intensity. It consists of 14 characters and anxiety behaviors which are associated with the specific symptoms of anxiety. The test scale is ranked by the interviewer. This scale encompasses a range of symptoms that often are diagnosed as symptoms of an anxious state. These symptoms include: anxious mood, tension, panic, insomnia, difficulty concentrating, muscle tension, general physical condition, cardio-vascular symptoms, respiratory symptoms and behavior during the interview. Also, studies on validity and reliability of this questionnaire, correlation of this questionnaire with beck depression (0.6), with SCL-90 (0.73) questionnaires and with clinical assessment (0.77) have been reported[6].

RESULTS

As shown in table 1, the sample size is divided evenly

Table 1. Demographic variables.

Variables	frequency	Percent
Sex		
Female	45	50%
Male	45	50%
Education		
Illiterate	2	2.2%
Under Diploma	16	17.7%
Diploma	42	46.6%
Bachelor of Science	22	24.4%
Master of Science	8	8.8%
Age		
15-24	6	6.6%
25-34	60	66.7%
35-44	10	11.2%
45-54	8	8.9%
More than 54	6	6.6%

between male and female. In other words, out of 120 participants, 60 subjects (50%) were men and 60 subjects (50%) were women. Education variable shows that no one was illiterate in the sample study, 18 (15%) were under diploma, 45 (37.5%) had diploma, 47 (40%) had Bachelor of Science and finally 9 (7.5%) had Master of Science. It is clear that those who have Bachelor of Science dedicated the most sample size to themselves. The number of participants in age group of 15-24 was 6 (5%), in 25-34 group was 75 (62.5), in 35-44 group was 19 (16%), in 45-54 group was 11 (9%) and in more than 54 age group was 9 (7.5%). The mean and standard deviation of the love variable total score were examined according to age, sex and education (Table 2).

Based on this table, the average score of female in love variable was 75.28. They fit to less likely in love group according to normal test. Males' average score

was 80.08. So, they fit to most likely in love group. The average score of 15-24 age group was 87.33. It means they were certainly in love. For age group of 25-34 the average score was 76.94. Therefore, they were less likely in love. 35-44 age group average score was 77.21. They were also less likely in love. The average score of age group of 45-54 was 77.18 which fit to less likely in love group. And at the end, for age group of more than 54 the average score was 68.25 which means they were most likely not in love. About education, the average score of under diploma group was 78.22 whom were less likely in love. The average score of diploma group in love variable was 77.90 which mean they were less likely in love, too. Those who had Bachelor and Master of Science with average score of 77.76 and 77.33 also were less likely in love.

Sex variable shows that female with average score of 13.77 and male with average score of 11.09 both fit to low anxiety group. The average score of participants in age ranges of 15-24, 25-34, 35-44 and 45-54 was 7.50, 10.93, 17.42 and 13.09, respectively; which means they all had low anxiety. For age group of more than 54, the average score was 23.50. Their anxiety status was medium. In education variable, the average score of under diploma, diploma, Bachelor of Science and Master of Science groups were 17.24, 12.52, 11.02 and 9.42, relatively. So, they had low anxiety level (Table 3).

About sex variable, table 4 shows that female with average score of 14.89 and male with average score of 15.67 would place in a little depressed group. Participants with age range of 15-24 had average score of 6.50 which means they were normal. The average score of age group of 25-34 was 13.83 which fit to a little depressed group.

Table 2. Mean and standard deviation of love variable total score on the basis of sex, age and education.

Variable	Mean	Standard Deviation
Sex		
Female	75.28	1.63
Male	80.08	1.24
Age		
15-24	87.33	5.85
25-34	76.94	1.44
35-44	77.21	1.92
45-54	77.18	1.14
More than 54	68.25	1.48
Education		
Under diploma	78.22	1.58
Diploma	77.90	1.59
Bachelor of science	77.76	1.29
Master of science	77.33	1.56

Table 3. Mean and standard deviation of the anxiety variable total score on the basis of sex, age and education.

Variable	Mean	Standard Deviation
Sex		
Female	13.77	9.62
Male	11.09	8.08
Age		
15-24	7.50	3.98
25-34	10.93	7.95
35-44	17.42	1.06
45-54	13.09	8.14
More than 54	23.50	1.18
Education		
Under diploma	17.22	1.08
Diploma	12.52	9.34
Bachelor of science	11.02	7.76
Master of science	9.42	1.56

Table 4. Mean and standard deviation of the depression variable total score on the basis of sex, age and education.

Variable	Mean	Standard Deviation
Sex		
Female	14.89	1.13
Male	15.67	1.12
Age		
15-24	6.50	5.31
25-34	13.83	1
35-44	19.05	1.29
45-54	19.36	1.39
More than 54	25.75	1.02
Education		
Under diploma	20.16	1.21
Diploma	17.25	1.16
Bachelor of science	12.44	9.16
Master of science	8.42	7.80

Both age groups of 35-44 and 45-54 with average score of 19.05 and 19.36 needed to consult with a psychiatrist. And finally, age group participants of more than 54 were recognized relatively depressed with average score of 25.75.

The first hypothesis of this study was to evaluate the relationship rate of love with depression and anxiety. To test this hypothesis, love correlation with depression and anxiety was examined. Because all three variables are quantitative, Pearson correlation was used.

According to table 5, love relationship with anxiety and depression is statistically significant in reverse direction (p-value <0.001). Hence, the anxiety and depression rates will be reduced when love is increased.

Another hypothesis is the relationship between the rate of anxiety and depression. To test this hypothesis, we examine the relationship between anxiety and depression. As both variables are quantitative, Pearson correlation was used. Results can be seen in table 5 & 6.

The relationship between anxiety and depression is statistically significant in straight direction (p-value <0.001). Anxiety will be increased when depression in also increased.

Table 5. Love relationship with anxiety and depression.

Love	Anxiety	Depression
Correlation coefficient	-0.40	-0.50
P value	P<0.001	P<0.001

Table 6. The relationship between anxiety and depression

Depression	Anxiety
Correlation coefficient	0.068
P value	<0.001

DISCUSSION

Romantic love which has been known as one of the most powerful emotional states over time was inspirational for some of the great achievements of human beings. Love which its characteristic is caring about a person is an emotionally complex contains sexual, cognitive and behavioral elements that their analysis is so difficult if not impossible[7,8]. Romantic love is an involuntary feeling, unstable and difficult to control[9-11]. Why love rise to such changes in feelings and behavior is a question that researchers have attempted to provide a reasonable answer for it. In this regard, they go through the study of biochemical processes in the emotional trends of the brain to find the answer[12]. Worldwide, romantic love has a key role in courtship. This is the most basic aspects of the partner selection system in human[3]. Researchers believe that the amount of affection people experience in their life depends upon social development, personal compatibility and physical health. In addition, love plays a functional role in the enjoyment and satisfaction of marital life[13]. Studies have shown that the existence of close relationship makes resistance against physical diseases and mental disorders including depression and anxiety[14-16].

Previous researches suggest that the failure of romantic relationships is accompanied by stress, anxiety and aggression which cause outpatient referring to treatment centers[17]. These results obtained also in the present study (Table 8). Various perspectives have been presented on the psychological nature of love and its compositions[18]. Researchers found that love is the fulfillment of mutual needs. Love is a process that couples create it themselves. As long as both partners are committed to continue their relationship and believe that love is what they have chosen themselves the romantic relationship will continue[19]. Recent studies indicate that 32% of women are traumatized during their marriage due to emotional problems and family conflicts[20]. Current study also noted an increase in anxiety of women (Table 3).

Depression has multiple reasons. Also, some evidences have been provided that the lack of social support and intimacy with family play an important role in development of depression. On the other hand, more than half of the patients with depressive disorder are faced with turbulent family function[21]. Johnson SM suggests that marital discord is an important risk factor for psychiatric disorders such as depression, anxiety, bipolar disorder, alcohol dependence and some of malignancies[22]. Researchers argue that marital discord can often be the starting point for hospitalization of depressed patients[23].

As a result, the cause of depression in women can be due to failed romantic relationships and marriages[24]. Love and loss are two sides of the same coin. Surely, every relationship ends in death or divorce and love experience leads to the inevitable confrontation of loss.

In fact, by understanding the nature and pattern of love exact understanding of grief and mourning would be possible. But in contrast, understanding the lack of a love object teaches us the nature of love. It means that the quality of loss experience is a reflection of quality of relationships before loss. Loss is the common outcome of love and is a cost which must be paid[1]. People experience love and loss throughout their life. Experience of loss can be considered a further resolving and settlement of separation-individuation process. Indeed, grief returns us to our core. Lack of love is accompanied by severe symptoms such as depression and anxiety which appear after the breakup of a romantic relationship. It lasts long time which impairs the multiple contexts of individual's performance (academic, social and professional) and would be followed by non-adaptive reactions.

Limited investigations have been performed on breakup process of love relationship and its consequences. Of course, this is a problem which is experienced enormously in adolescence and adult period and has far-reaching outcomes on person's life.

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