

# Original Research Article

## **Marital Status** and Level of Depression and Anxiety

### ABSTRACT

**Background:** Romantic relationships were described as the unique partnership where intimacy and mutual feelings of love and affection are manifested. However they may be linked with some level of anxiety and depression - two separate conditions, that strongly linked to one another with almost indistinguishable elements. The aim of the study to analyse the link between romantic relationships and depression & anxiety.

**Methods:** A total of 120 participants currently engaged in a dating romantic relationship (80) and marriage (40), specifically targeting young adults aged between 18-35 ( $M = 24.79$  years) have filled questionnaires. Main instruments that were used in this paper were: Rubin's Love Scale, PHQ-9 ) and Zung's anxiety scale.

**Results:** Results supported findings from previous research that are conducted in this field. While depression and anxiety levels are positively linked, participants who answered the questionnaire showed that when the love in the romantic relationship is high, anxiety and depression symptoms seemed to be decreased. Married individuals are more likely to have a high score of love and less score on depression & anxiety compared to individuals who are engaged in a dating relationship.

### Conclusions

Romantic or - better described- companionate love component of the relationships are linked with fewer symptoms of anxiety and depression. Married individuals had a higher score of romantic love, and fewer symptoms of depression anxiety, compared with the ones who were in a committed relationship.

### Keywords

Philosophy of love, ethics of marriage, well-being, depression, anxiety.

## 1. Introduction

Romantic relationships exist amongst human beings and have existed since the very early days of human civilization and still are an essential part of human lives. Having a full understanding may enhance the quality of these relationships and overall wellbeing and help lower the occurrence of negative emotions and mental health problems. Studies like this can help to understand the complex nature of romantic relationships and their relations to human well-being.

Romantic relationships were described as the unique partnership where intimacy and mutual feelings of love and affection are manifested. There are many types of romantic relationships; however, this research paper limits the broad meaning by looking into three different types of romantic relationships: dating relationship, engagement, and marriage. All of these terms can be labeled as committed long-term monogamous relationships.

The reason behind the interest of focusing only on these so-called “long-term committed relationships” is based on the fact that couples start becoming more confident and familiar with one other over time. Fulfillment, which comes along with the relationship gradually, expands, and couples continue forming and retraining common interests and exchanging values that are essential for them [1].

Braithwaite, Delve, and Fincham (2010) also argued that long term commitment takes a lot of time and space in an individual’s life, resulting in the prevention of them getting involved in dangerous or harmful activities as well as having better mental health [2].

Before trying to understand the link between romantic relationships and mental problems, it is crucial to have a high awareness of the romantic relationship itself. When we say romantic relationships, it is widely accepted that love is the fundamental basis of romantic relationships. Emotions also seem intrinsic to sexuality, whether emotions of love, desire for pleasure, or desire for union with another person. Yet loves and desires can be extremely diverse in sexual experiences - selfish or unselfish, angry or jealous, romantic or without romance, passionate or steady, mature or immature [3,4].

Love might have different dynamics and different components, which might be hard to identify and name. People might have love and passion for many things, family, hobbies, friends, animals, yet; this research paper investigates the subjective experiences of romantic love within three different kinds of committed longtime partnerships.

The expression of love is linked with attachment or affectional bonds to one another. Besides, unconventionality seems to be a vital factor in sexual attraction, which is one of the needed elements for a person to identify the love that he or she is feeling as romantic love [5].

The other constructs that are being analyzed in the paper are depression and anxiety. Depression could occur due to a combination of multiple factors such as biological, environmental and psychological. Besides, it could be found in individuals of any age.

Anxiety has been usually described as the answer to threats. When there is a scene where the individual is faced with a material hazard, it is natural that the heart rate and blood pressure go up and pays more attention to the state of being alert, on the other hand, when there is no risk situation or minimal amounts of it, anxiety causes the individual to give the same responses [6].

Anxiety and depression are two separate conditions strongly linked to one another with almost indistinguishable elements. People who experience depression tend to have characteristics of anxiety disorders, and patients who experience anxiety tend to have features of depression, which can quickly submerge together. Sometimes it can be difficult to distinguish one from the other [7].

Anxiety (disorder), on the other hand, is explained with experiences of fear, of anxiety in circumstances where others would not feel such emotions. If being unattended, both depression and anxiety can decrease the overall quality of life quality [8] Especially when combined with depression, it causes symptoms to multiply, generates a more significant risk of self-harm, is resistant to clinical help, and has a more substantial impact on a person's life [7].

The link between romantic relationships and anxiety might make it more challenging to investigate the connections between depression and romantic relationships, as they may be mistaken for one another, so it is crucial to study it thoroughly and understand if symptoms of depression and romantic relationships are regarded as anxiety or not [8].

This paper is trying to examine if being in a romantic relationship is linked with a positive psychological well-being of an individual, or if romantic relationships worsen the symptoms and early signs of depression and anxiety, and causes people to be more prone to these mental problems while trying to compare the levels of romantic love depression and anxiety in males and females.

Therefore, the study of romantic relationships and psychological symptoms can help to understand the interlinked connections in the far-reaching framework [9]. Thus, this research hoped to bring new insights and increase knowledge to one of the most commonly studied - yet not very well understood - concepts in psychology and human life.

## 2. MATERIALS AND METHODS

### 2.1 Participants

The study included young adults (from single Youth Center) aged between 18-35. The mean age of the participants was 24.4. A total of 120 participants (60 males and 60 females) were analyzed. All participants were healthy, without any diagnosis of psychiatric illness. Sampling method was random selection

#### Sample size calculation

$$\text{Sample size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left( \frac{z^2 \times p(1-p)}{e^2 N} \right)}$$

N = population size – 10000 (Participants of Youth Center)

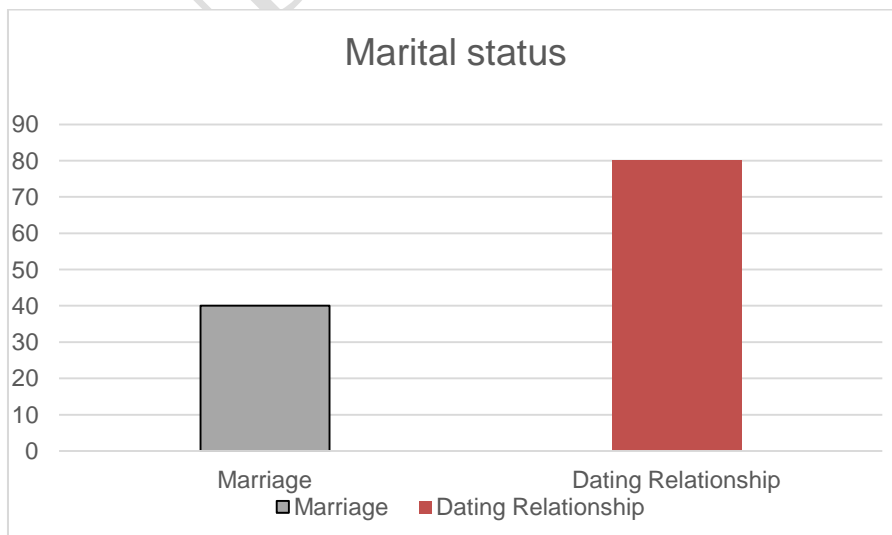
e = Margin of error (percentage in decimal form) - 5%

p = prevalence of people in marital or non-marital partnership which was 72% (0.72)

z = z-score - 1.96

Calculated minimal sample size for questionnairing = 105

Figure 1 Marital status of participants



## 2.2 Assessment Tools

Participants were asked to complete a total of three questionnaires related to romantic love, symptoms of depression, and symptoms of anxiety. The surveys that were used in this study were Rubin's Love Scale, Patient Health Questionnaire (PHQ-9) and Zung's Self-rating Anxiety scale (Zung, 1971). Participants answered in a total of 42 questions.

### Instrument: Rubin's Love Scale

Rubin's Love Scale (Rubin, 1970) has consisted of 13 items reflecting a more widely accepted concept of interpersonal attraction. Rubin's scale is commonly used in studies that involve the measures of the idea like affection, romance and love. It is found to be an excellent match for this study because it is directly linked with measuring companionate love, which we consider as one of the essential elements of a romantic relationship.

### Instrument: Patient Health Questionnaire (PHQ-9)

To assess depressive traits, Patient Health Questionnaire (PHQ-9) by Kroenke & Spitzer (2002) was used. PHQ-9 is also a public domain measure that can be downloaded online.

The PHQ-9 has been commonly used in plenty of different types of studies in various settings. PHQ-9 is a publicly accessible scale that is available both in English and over thirty languages worldwide (Kroenke & Spitzer, 2002).

Respondents were asked to click on the answer based on their own experience of being exposed to the following problems presented on the questionnaires over the past two weeks.

### Zung Self-rating Anxiety Scale (Zung, 1971)

Instruments: Made up of 20 items, the scale is scored from 1-4 points indicating 1=a little of the time, 2=some of the time, 3=good part of the time, 4=most of the time. It is not considered a substitute for a professional diagnosis. On the other hand, there are 4 reverse items counted the other way around (5, 9, 13, 19) since they are indicators of a non-anxiety related positive state. Total scores can be calculated as 20-44 normal range, 45-59 mild to moderate anxiety level, 60-74 severe anxiety level, 75-80 extreme anxiety level. The test is created to propose an improved insight on self-reported anxiety based on severity.

## 2.3 Statistical analysis

IBM SPSS 17 software was used to calculate the data. Reliability analysis completed successfully, indicating that the three scales used in this study were reliable. A new round of data collection performed, and once again collected data-set was entered into IBM SPSS 17 software. Based on the collected data a normality test was performed. Normality test (Kolmogorov Smirnov) showed, that data are non parametric, so Mann-Whitney test was applied to compare groups and Spearman test was used for correlational analysis.

### 3. RESULTS

A non-parametric Spearman rank-order coefficient was calculated to assess the relationship between romantic love and depression. ( $r = -.527$ ,  $p < 0.01$ ) Results indicated A moderate negative correlation between a romantic relationship and depression levels. While romantic love rises, symptoms of depression decrease.

A non-parametric spearman's correlation was conducted to see the connection between anxiety and romantic love ( $r = -.535$ ,  $p < 0.01$ ) — a moderate negative correlation between a romantic relationship and depression levels matching with the findings for depression. Results indicate a negative correlation, supporting the proposed hypothesis, hinting that the higher the love scores, the lower the anxiety is.

A non-parametric spearman's correlation used to assess the relationship between anxiety and depression results indicated a moderate positive correlation between depression and anxiety ( $r = .670$ ,  $p < 0.01$ ), the findings are correlated with what was being predicted, as anxiety and depression often closely relate despite being different (Tracy, 2012).

Table 1 shows that males scored significantly higher on romantic love than females

*Table 1 Level of romantic love between genders*

Gender	N	Mean Rank	U	P
female	60	54,76	1484	116
male	60	66,24		

*Table 2 Difference between genders on levels of anxiety*

Gender		N	Mean Rank	U	P
Female	60	65,77	65,77	161	340
Male	60	55,23	55,23		
total	120				

A Mann-Whitney test indicated that females showed higher levels of anxiety (M=65,77 more than females M=55,23 U=1484, p=.097 (Table 2).

#### ***Difference between genders on levels of depression***

Mann-Whitney test indicated that females showed higher levels of depression more than males M=57.48 U=1618.5, p=.340.

#### **Difference between Marriage and Dating Relationships**

A non-parametric Mann-Whitney U test indicates that married participants scored higher levels of romantic love, while participants who engaged in a dating relationship scored lower levels of romantic love meaning married individuals to have higher levels of romantic love.

*Table 3 The level of anxiety in marriage and just dating groups*

	Marital Status	N	Mean Rank	Sum of Ranks
anxiety	married	40	43,71	1748,50
	relationship	80	68,89	5511,50
	Total	120		

Results show that individuals engaged in a romantic relationship tend to have higher levels of anxiety comparing to those who are married (Table 3).

#### 4. DISCUSSION

It could have been concluded, based on the results, that the more compassionate love people feel towards their partner, the lower their depression levels are and vice-versa; lesser scores of romantic tend to prevail the more they experience depressive symptoms ( $R_s = -.527$ ,  $p < 0.01$ ). Results were similar to the construct of anxiety. Findings are supported by previous studies indicating that romantic commitment promotes healthier physiological and psychological health [2].

Usually, there are not many studies that suggest that females have a higher romantic love or sentimental attributes. However, researchers are seemly divided on this subject. A similar measure of romanticism, the Romantic Beliefs Scale by Sprenger and Meets (1989) that shared similar items with Rubin's love scale (e.g. "I expect that in my relationship, romantic love will last; it won't fade with time"), found out that men scored notably higher scores of romance than women [10-11]. Furthermore, Sprenger and Meets (1989) argued that males have a higher tendency to put a lot of emphasis on the passion component of the relationships compared to females. A cross-sectional Indian study examined the differences between gender and results revealed that passionate love and romantic obsession was significantly higher in females than in males [12].

Preventing anxiety in females can happen due to many factors such as biological components, social constructs and differences in genetics compared to men [13]. Females are also much more prone to depression due to biological aspects and social contexts [14].

We found that married people had lower scores on anxiety, depression and higher scores on romantic love. This can be explained with marriage usually occurring on later stages of young adulthood, where individuals start to have more independence, financial freedom and having already established experiences both about love and relationships. Kim & McKenney (2002) studied the link between well-being and marriage and their findings demonstrated a significant relationship between marriage and well-being [15]. Feeling that one is loved and cared for improves emotional well-being, decreasing depression and anxiety and increasing psychological resources such as self-esteem, mastery and confidence. The intimacy and emotional support that are part and parcel of a good marriage, then lead to better emotional health as well as better physical health in husbands and wives [16,17]. Moreover, O'Leary et al. (2011) found out that married people revealed to have an enormous amount of love towards their partners, correlating with findings of the present study [18].

Results from the study came up as it is predicted for the most part. However, there were quite a few impressive results, such as males having higher levels of romantic love.

This research paper aims to contribute to growing research based on literature and hope to give more insight into the dynamics of the partnership.

## 5.CONCLUSIONS

The current study showed, that there is a negative correlation between romantic love and depression levels. There is a negative correlation between romantic love and anxiety levels.

Males had higher scores of romantic love than females. Females tend to score higher on anxiety and depression symptoms compared to males. Married individuals had a higher score of romantic love, and fewer symptoms of depression anxiety, compared with the ones who were in a committed relationship.

### ETHICAL APPROVAL

The protocol of the study was approved from the ethical committee of Tanta faculty of Medicine. Permission was taken from local health authority.

### Consent

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

### DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

## References

1. Fiske V, Peterson C. Love and Depression: The Nature of Depressive Romantic Relationships. *Journal of Social and Clinical Psychology*. 1991;10(1):75-90.  
DOI:10.1521/jscp. 1991.10.1.75
2. Braithwaite SR, Delevi R, Fincham FD. Romantic relationships and the physical and mental health of college students. *Personal Relationships*. 2010;17(1):1-12.  
DOI: 10.1111/j.1475-6811.2010.01248.x
3. Farley M.A. *Just Love: A Framework for Christian Sexual Ethics*. The Continuum International Publishing Group Inc; 2008.

4      Henrickson M, Giwa S, Hafford-Letchfield T, Cocker C, Mulé NJ, Schaub J, Baril A. Research Ethics with Gender and Sexually Diverse Persons. *Int J Environ Res Public Health*. 2020;17(18):6615. DOI: 10.3390/ijerph17186615.

5.      Mikulincer M, Goodman GS. Dynamics of romantic love: Attachment, caregiving, and sex. Guilford Press; 2006.
6.      Bremner JD, Krystal JH, Southwick SM, Charney DS. Noradrenergic mechanisms in stress and anxiety: I. preclinical studies. *Synapse*. 1996; 23(1): 28-38.  
DOI:10.1002/(sici)1098-2396(199605)23:13.0.co;2-j
7.      Tiller JWG. Depression and anxiety. *Medical Journal of Australia*, 2013; 199(S6).  
DOI: 10.5694/mja12.1062
8.      Treger S, Sprecher S, Hatfield EC. Love. *Encyclopedia of Quality of Life and Well-Being Research*. 2014: 3708–3712.  
DOI: 10.1007/978-94-007-0753-5\_1706
9.      Starr LR, Davila J, Stroud CB, Clara Li PC, Yoneda A, Hershenberg R, Ramsay Miller M. Love Hurts (in More Ways Than One): Specificity of Psychological Symptoms as Predictors and Consequences of Romantic Activity Among Early Adolescent Girls. *Journal of Clinical Psychology*. 2012; 68(4) 373–381.  
DOI:10.1002/jclp.20862
10.     Yin J, Zou Z, Song H, Zhang Z, Yang B, Huang X. Cognition, emotion and reward networks associated with sex differences for romantic appraisals. *Sci Rep*. 2018; 12;8(1):2835.  
DOI: 10.1038/s41598-018-21079-5.
11.     Sprecher S, Metts S. Development of the 'Romantic Beliefs Scale' and Examination of the Effects of Gender and Gender-Role Orientation. *Journal of Social and Personal Relationships*. 1989; 6(4) 387–411.  
DOI:10.1177/0265407589064001
12.     Singh AK. The Psychology of Love: Exploring the Gender Differences in Unmarried and Married Couples. *SSRN Electronic Journal*. 2012.  
DOI:10.2139/ssrn.2325910
13.     August KJ, Kelly CS, Markey CN. Marriage, Romantic Relationships, and Health. *Encyclopedia of Mental Health*. 2016: 46–52.  
DOI:10.1016/b978-0-12-397045-9.00074-4
14.     Lantagne A, Furman W. Romantic relationship development: The interplay between age and relationship length. *Developmental Psychology*. 2017; 53(9) 1738–1749.  
DOI: 10.1037/dev0000363

15. Kim HK, McKenery PC. The Relationship Between Marriage and Psychological Well-being. *Journal of Family Issues*. 2002; 23(8) 885–911.

DOI:10.1177/019251302237296

16. Waite LJ, Lehrer EL. The Benefits from Marriage and Religion in the United States: A Comparative Analysis. *Popul Dev Rev*. 2003;29(2):255-276.

DOI:10.1111/j.1728-4457.2003.00255.x

17. Fraser RN, Dalton JH, Burkhart JW, Collins JT. Shared Christian Religious Identity, Religiousness, and Marital Satisfaction. *J Pastoral Care Counsel*. 2021; 75(2):126-132.

DOI: 10.1177/1542305021996229. PMID: 34137331.

18. O’Leary KD, Acevedo BP, Aron A, Huddy L, Mashek D. Is Long-Term Love More Than A Rare Phenomenon? If So, What Are Its Correlates? *Social Psychological and Personality Science*. 2011; 3(2), 241–249.

DOI:10.1177/1948550611417015