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TRIANGULAR LOVE AMONG YOUNG ADULTS: THE PREDICTIVE ROLE OF BASIC PERSONALITY TRAITS AND SELF-ESTEEM

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ABSTRACT

This study aims to investigate the role of basic personality traits (conscientiousness, agreeableness, extraversion, openness to experience, neuroticism, and negative valence) and self-esteem in predicting the triangular love among young adults who have been and who have not been in a romantic relationship with a sample composed of Turkish university students. The participants of this study include 895 (57% women, age range from 18 to 26) university students enrolled in several faculties of a state university in Turkey and were selected using convenient sampling. The participants were also separated into two groups. The first group was composed of 350 students (218 females; Mage = 21.85, SD = 1.99) who were involved in a romantic relationship and the second group was composed of 545 students (293 females; Mage =21.59, SD = 1.92) who were not involved in a romantic relationship. Participants completed the Turkish versions of the Rosenberg Self-Esteem Scale, the Basic Personality Traits Inventory, the Sternberg Triangular Love Scale and the Sternberg Triangular Love Scale-Modified. Data analysis was performed through the Pearson correlation and multiple regression analysis. The results showed that while agreeableness, conscientiousness and negative valence of personality traits with self-esteem were the significant predictors of triangular love among young adults who were involved in a romantic relationship, only agreeableness and conscientiousness were the significant predictors of triangular love of university students who were not involved in a romantic relationship. The current research signifies the worth of examining relationships between triangular love and basic personality traits among young adults who were and who were not involved in a romantic relationship.

Keywords: Romantic relationships, triangular love, personality traits, self-esteem, university student.

INTRODUCTION

Romantic relationships and love have existed throughout human history and formed an indispensable part of people's life (Pines, 2010). Although the meaning and value attributed to love might demonstrate differences based on interpersonal and intercultural differences (Dion & Dion, 1993), love is a universal phenomenon and is experienced mostly by all healthy individuals (Hendrick & Hendrick, 1986). Hence, romantic love has been a very important topic in all periods of individuals' life (Neto, 2012).

Love, an essential topic in the fields of philosophy and literature, is one of the focus of interest in the field of psychology. As a multifaceted concept (Berscheid & Meyers, 1996), love has been investigated by many researchers for decades, and so far many theories and models have been proposed about it (Kanemasa, Taniguchi & Daibo, 2001). Among diverse theories of love such as Rubin's (1970) theory of liking-loving and Lee's (1977) six basic love styles typology, Sternberg's (1986) theory of triangular love has also been closely concerned by the scholars in recent years. This theory involves intimacy, passion, and commitment components, which are considered to reflect the emotional, motivational, and cognitive characteristics of love (Kın NG & Cheng, 2010). Sternberg (1997), who claims that each component represents a different aspect of love, states that the intensity of love increases or decreases depending on these components and also reports that these components reflect emotional interactions of an individual towards his/her previous, current, and future partners. Therefore, this model is considered to contribute to obtaining comprehensive information specific to different aspects of love (Engel, Olson & Patrick, 2002).

Basic Personality Traits and Love

Like love, personality as a complicated subject maintains its importance in psychology. At this point, particularly the investigation of the relationships between love and significant personality characteristics is noteworthy (White, Hendrick, & Hendrick, 2004). However, the association between basic personality traits and the framework of triangular love across different populations and cultures has not been fully explored (Ahmetoglu, Swami & Chamorro-Premuzic, 2010; Dehestani, Sharabiani, Nooripour & Zanganeh, 2018). In literature, the Five-Factor Model (FFM; McCrae & Costa, 1990) is one of the commonly used personality structures in the preceding work of love. The NEO-PI-R (Costa & McCrae, 1992) as identified by the FFM is also a well-known and commonly used measure in love-focused research. Alternatively, Gençöz and Öncül (2012) emphasize the importance of studying personality traits considering cultural differences especially in cultures that are not entirely individualistic, like Turkey. In this viewpoint, basic personality traits inventory (BPTI; Gençöz & Öncül, 2012) was developed with original concepts and expressions with a view to investigating the cross-cultural variation regarding the basic factors of the FFM. Therefore, considering the changing cultural structure of Turkey from collectivism to individualism (İmamoğlu, 2003), this study utilized the BPTI with the purpose of enabling a different viewpoint to the usual understanding of personality. In this regard, the relationship between the triangular love and basic personality traits covered within the scope of BPTI (conscientiousness, agreeableness,

extraversion, openness to experience, neuroticism, and negative valence) is considered to be a topic worth investigating.

Self-Esteem and Love

Self-esteem is perceived as another essential determinant theoretically linked to romantic relationships and love (Acevedo & Aron). Although previous studies stated that self-esteem is predicted in Lee's (1977) taxonomy of love styles such as passionate love, friendship love and manic love (Campbell, Foster & Finkel, 2002; Zeigler-Hill, Britton, Holden & Besser, 2015; Fatimah, 2018), the available research did not examine the link between self-esteem and Sternberg's model of love. Therefore, an investigation of the relationship between self-esteem and triangular love is considered to contribute to the literature.

Current Study

Romantic relationships and love are emphasized to be of great importance for university students within the focus of the need for intimacy, which is among the developmental tasks of young adults (Chickering & Reiser, 1993). Healthy romantic relationships experienced in the young adulthood period increase university students' self-confidence (Larson, 1988), life satisfaction (Lemieux & Hale, 1999) and subjective well-being (Kim & Hatfield, 2004), and decrease experiencing health problems and engaging in risky behaviors (Braithwaite, Delevi & Fincham, 2010). It is also reported that young adults endeavor for more permanent and committed relationships (Sumter, Valkenburg, & Peter, 2013) and tend to look for long-term romantic partners (Collins, Cooper, Albino, & Allard, 2002). Based on this, the concept of love seems to be important in terms of the nature of romantic relationships (Fletcher, Simpson, & Thomas, 2000; Kın NG & Cheng, 2010). At this point, studies to focus on university students' perceptions, attitudes, and expectations about love are considered to be of great importance. On the other hand, love-focused studies in the literature conducted with university students usually involved young adults who were in a romantic relationship but they rarely focused on young people who were not in a romantic relationship. Thus, it is thought that addressing university students who are and who are not in a romantic relationship together will provide more comprehensive perspective.

With this viewpoint, the present research aims to investigate whether the personality traits (conscientiousness, agreeableness, extraversion, openness to experience, neuroticism, and negative valence) and self-esteem predict the triangular love levels of university students who have been and have not been in a romantic relationship. In this way, a holistic view could be possible to the understanding of how significant personality traits that affect and do not affect love influence the views of young adults towards love.

METHOD

Research Model

The correlational model was used in this study. One of the basic purposes of correlational research is to predict likely outcomes as a type of non-experimental research method. In this model, the possible predictive relationships between the outcome variable and the predictor variables are described if a relation of sufficient magnitude exists among variables (Fraenkel, Wallen & Hyun, 2012).

Participants

The participants of this study include 895 (57% women, age range from 18 to 26) university students enrolled in several faculties of a state university in Turkey and were selected using convenient sampling. Of the total sample, 239 (26.7%) were enrolled in the first year, 185 (20.7%) were in the second year, 215 (28.6%) were in the third year, and 256 (28.6%) were in the fourth year. The participants were also separated into two groups. The first group was composed of 350 students (218 females; M_{age} = 21.85, SD = 1.99) who were involved in a romantic relationship and the second group was composed of 545 students (293 females; M_{age} =21.59, SD = 1.92) who were not involved in a romantic relationship.

Data Collection Tools

The Basic Personality Traits Inventory (BPTI)

The Basic Personality Traits Inventory (Gençöz & Öncül, 2012) is a self-report assessment tool that measures basic personality traits within the scope of a "Five-Factor Personality Model". The inventory is composed of 45 person-descriptive adjectives and comprises a total number of six personality traits that include conscientiousness, (8 items), agreeableness (8 items), extraversion (8 items), openness to experience (6 items), neuroticism (9 items), and negative valence (6 items) respectively. Participants respond to the scale items on a five-point scale ranging from 1 "not relevant at all" to 5 "always relevant". The reliability coefficients identified with Cronbach's alpha for the six personality traits range between .71 and .89. Test-retest reliability coefficients of the six characteristics also range between .71 and .84 (Gençöz & Öncül, 2012).

The Rosenberg Self-Esteem Scale (*RSES*)

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) is a unidimensional ten-item measure of global self-esteem assessed on a four-point scale (1 = Strongly agree, 4 = Strongly disagree). Internal consistency of the original scale was .80, and the test-retest reliability coefficient was .85. The RSES was adjusted to Turkish by Çuhadaroğlu (1986) and the test-retest reliability coefficient was found .75.

The Sternberg Triangular Love Scale (STLS)

The Sternberg Triangular Love Scale (*STLS*; Sternberg, 1997) aims to measure the levels of intimacy, commitment, and passion components within the framework of triangular love theory. The original STLS is a 36-item scale represented with 12 items in each sub-scale (intimacy, passion, commitment). Each item in the scale is responded between 1 "totally disagree" and 9 "totally agree". Turkish adaptation of the scale was performed by Soyer and Gizir (2021), and it was reported to have a 24-item and three-factor structure (intimacy, commitment, passion). Cronbach's alpha internal consistency coefficient of the Turkish STLS was reported to be .96, and the test-retest reliability was .95.

Sternberg Triangular Love Scale - Modified (STLS-M)

Sternberg Triangular Love Scale - Modified (STLS-M; Soloski, Pavkov, Sweeney, & Wetchler, 2013) is the revised form of the STLS used for identifying thoughts and expectations of individuals who are not involved in a romantic relationship about love. The Turkish adaptation of the scale was performed by Soyer and Gizir (2021), and similar to the Turkish STLS, the Turkish STLS-M was found to have a 24-item and three-factor structure (intimacy, commitment, passion). Internal consistency of the Turkish STLS-M was .95, and the test-retest reliability coefficient was .81. In addition, measurement invariance of the Turkish versions of the STLS-M and STLS was examined, and the results indicated that the Turkish STLS-M and STLS met the measurement invariance criteria (Soyer & Gizir, 2021).

Data Collection

This research was approved by the Social Sciences Research Ethics Committee of Mersin University dated 28/02/2017 and numbered 2017/14. All the questionnaires were administered in class. After receiving a written informed consent, all the voluntary participants completed the RSES, the BPTI, and the Demographic Information Form respectively. Finally, the participants who were involved in a romantic relationship filled out STLS while others who were not involved in a romantic relationship completed STLS-M.

Data Analysis

The correlation and multiple regression analysis were used to analyze the data. The assumptions of the analyses including normality, missing values and multicollinearity were also examined. The results indicated that the scores obtained from the scales showed a normal distribution and there was a linear relationship between the variables. When multicollinearity were taken into consideration, the results showed that the Pearson's correlation coefficients among the variables were below .80 (Gravetter & Wallnau, 2007), the tolerance value of the variables (between .78 and .83) are greater than .20 and VIF values (between 1.21 and 1.29) are less than .10 (Büyüköztürk, 2011). Thus, it was concluded that there was no multicollinearity among variables. Then, two multiple regression analyses were performed to check the personality traits (conscientiousness, agreeableness,

extraversion, openness to experience, neuroticism, and negative valence) and self-esteem predict the triangular love levels of university students who have been and have not been in a romantic relationship, separately. The level of significance was accepted as .05 in the study.

FINDINGS

Pearson correlations and descriptive statistics for all measures across two study groups differentiated by being or not being involved in a romantic relationship are presented in Table 1. In the literature, using a single one-dimensional structure of STLS is recommended (Graham, 2010; Hendrick & Hendrick, 2003) because of item overlap and high correlations among the STLS subscales although it might be possible to distinguish them (Acker & Davis, 1992; Sternberg, 1997). For this reason, a total scale score calculated for Turkish STLS and STLS-M separately to combine the subscales into a single variable called triangular love as performed by Soloski et al. (2013).

Table 1. Pearson Correlations, Descriptive Statistics, and Reliabilities for All Measures across Study Groups.

Variables	1	2	3	4	5	6	7	8	M	SD	α
1. Triangular love	-	.02	-.01	.18**	.26**	.04	.03	-.07	171.1	31.89	.94
2. Self-esteem	.21**	-	.45**	.25**	.25**	-.19**	.53*	-.20*	31.14	5.47	.88
3. Extraversion	.01	.36**	-	.17**	.20**	-.20**	.48**	-.18**	26.95	6.83	.84
4. Conscientiousness	.21**	.28**	.24**	-	.34**	.02	.29**	-.25**	29.11	6.06	.82
5. Agreeableness	.26**	.21**	.17*	.39**	-	-.05	.38**	-.45**	34.37	4.28	.84
6. Neuroticism	-.04	-.23**	-.26**	-.26**	-.10	-	-.06	.31**	25.72	6.73	.77
7. Openness experience	.09	.46**	.49**	.29**	.33**	-.09	-	-.08	22.20	4.24	.76
8. Negative valence	-.22**	-.16*	-.11*	-.16*	-.31**	.18**	.05	-	9.95	3.57	.70
M	180.6	32.27	28.37	30.09	35.09	26.33	23.03	9.42			
SD	33.51	4.84	6.48	5.84	4.05	6.54	3.72	3.28			
Cronbach alpha (α)	.96	.84	.83	.82	.84	.75	.71	.69			

Note: Intercorrelations for participants who have been in a romantic relationship (Group1; *N=350*) are presented below the diagonal, and intercorrelations for participants who have not been in a romantic relationship (Group2; *N=545*) are presented above the diagonal. Descriptive statistics of measures for Group1 are presented in the vertical columns, and descriptive statistics of measures for Group2 are presented in the horizontal rows.
* p < .01.
** p < .001.

As it is seen in Table 1, noteworthy positive relationships were observed between the triangular love and self-esteem (r = .21, p < .001), conscientiousness (r = .21, p < .001), and agreeableness (r = .26, p < .001) among university students who were involved in a romantic relationship. In addition, negative valence (r = -.22, p < .001) was found to be the only personality trait that negatively correlated with triangular love. As to the university students who were not involved in a romantic relationship, significant positive correlations were also observed between the triangular love and agreeableness (r = .26, p < .001) and conscientiousness (r = .18, p < .001) respectively.

The results of multiple regression analyses performed with two study groups are shown in Table 2. Specifically, the findings indicated that self-esteem (β = .17; t =2.91, p < .01), conscientiousness (β = .12; t = 2.12, p < .05), agreeableness (β = .17, t = 2.80, p < .001), and negative valence (β = -.14, t = -2.45, p < .01) predicted the triangular love among university students who have been in a romantic relationship (F $_{(7, 887)}$ = 7.33, p< .001; R = .36, R^2 = .13). When the university students who have not been in a romantic relationship was considered,

conscientiousness (β = .13; t = 2.87, p < .01) and agreeableness (β = .28, t = 5.49, p < .001) were found to predict the triangular love significantly (F $_{(7, 887)}$ = 7.38, p< .001; R = .30, R^2 = .09).

Table 2. Results of Multiple Regression Analysis across Study Groups.

	R	R^2	F	p	B	SE$_B$	95% CI	β	t	p
Group 1(STLS)	.36	.13	7.33	.00***						
Constant					98.66	22.75	[47.11, 154.39]	-	4.34	.000***
Self-esteem					1.20	.41	[.34, 2.02]	.17	2.91	.004**
Extraversion					-.51	.31	[-1.14, .12]	-.10	-1.63	.105
Conscientiousness					.70	.33	[-.002, 1.32]	.12	2.12	.035*
Agreeableness					1.38	.49	[.14, 2.54]	.17	2.80	.005**
Neuroticism					.23	.28	[-.37, .81]	.05	.84	.404
Openness to experience					-.22	.60	[-1.63, 1.04]	-.03	-.37	.711
Negative valence					-1.39	.57	[-2.64, .009]	-.14	-2.45	.015*
Group 2 (STLS-M)	.30	.09	7.38	.00***						
Constant					89.14	16.40	[61.26, 121.38]	-	5.44	.000***
Self-esteem					-.03	.30	[-.77, .63]	-.01	-.09	.930
Extraversion					-.07	.23	[-.58, .41]	-.02	-.31	.755
Conscientiousness					.69	.24	[.13, 1.21]	.13	2.87	.004**
Agreeableness					2.10	.38	[1.29, 2.80]	.28	5.49	.000***
Neuroticism					.11	.21	[-.35, .55]	.02	.50	.617
Openness to experience					-.71	.42	[-1.70, .25]	-.10	-1.71	.088
Negative valence					.58	.45	[-.24, 1.36]	.07	1.29	.199

Note. Group1 = participants who have been in a relationship (N=350), Group2 = participants who have not been in a relationship (N=545).
*p < .05.
** p < .01.
*** p < .001.

CONCLUSION and DISCUSSION

The findings of this study showed that agreeableness predicted the triangular love levels of young adults who were and who were not involved in a romantic relationship. The related literature reports that agreeable individuals can regulate their positive and negative emotions more easily (Tobin, Graziano, Vanman, & Tassinary, 2000), have stronger negotiation skills (Sharma & Raju, 2013), experience fewer conflicts in interpersonal relationships (Bruck & Allen, 2003), and are more motivated to establish positive relationships with other individuals (Grazino, Jensen-Campbell, & Hair, 1996). Agreeable individuals could also be more successful in establishing and maintaining romantic relationships (Tobin et al., 2000). Moreover, characteristics specific to agreeableness seem to be closely associated with intimacy and commitment dimensions within the triangular love. The intimacy aspect in the triangular love theory is associated with mutual emotions such as mutualness, commitment, and valuing (Sternberg, 1986). Intimacy reflects the need for mutual understanding such as honesty and candidness with the romantic partner (Sternberg, 1997). As to the commitment that forms the triangular love, it is defined as the effort and determination of an individual to maintain and continue love in a romantic relationship for a long time (Andrade, Wachelke, & Howat-Rodrigues, 2015). With this aspect, it is rather meaningful that agreeableness predicts the triangular love levels of university students in a significant and positive way. Indeed, Ahmedoğlu, Swami and Chamorro-Premuzic (2010) reported that there were significant, positive relationships between agreeableness and all three components of triangular love.

Conscientiousness is another personality trait that positively predicted the triangular love levels of young-adults who were and who were not involved in a romantic relationship. The literature includes several studies that report positive and significant relationships between conscientiousness and love (Ahmetoglu et al., 2010; Engel et al., 2002; Wan, Luk, & Lai, 2000; White et al., 2004). Those who have conscientiousness personality trait are defined as individuals who can regulate and actively plan their behaviors in order to reach the goals and complete all the tasks (Szalma & Taylor, 2011; Habibi et al., 2018). Instead of personal goals, conscientious individuals focus more on being "us" in romantic relationships (McCrae & John, 1992) and generally incline to committed relations (Jonason, Hatfield, & Boler, 2015). Based on this, it is quite meaningful that conscientiousness positively predicts the triangular love.

Furthermore, it is notable that agreeableness and conscientiousness also significantly predicted the triangular love among young people who were not involved in a romantic relationship. There is a high emphasis on close connections with family, friends, and social groups in collectivist cultures like in Turkey; intra-familial positive relationships, intimacy, and commitment are highly prioritized values to be possessed by individuals (İmamoğlu, 2003). In addition, the romantic relationships experienced in Turkish culture expect and require individuals to possess each other excessively, do almost all activities together, and have high expectations about the permanency and marriage expectations in relationships (Yalçın, 2010). Hence, it is not surprising that whether they were in a romantic relationship or not, agreeableness and conscientiousness are perceived as the basic requirements of love by young individuals.

The results show that negative valence was another personality trait that negatively predicted the triangular love only in young individuals who were in a romantic relationship. Negative valence, as a negative aspect of personality, represents a lack of courage and self-value in fighting with problematic situations. (Gençöz & Öncül, 2012). The literature reports that people with low self-value are more anxious about the characteristics of their partner (Doron & Szepsenwol, 2015) and direct suspicions about their romantic partners to their self-confidence (Murray, Holmes, MacDonald, & Ellsworth, 1998). Hence, it is inevitable that high negative valence has negative consequences in romantic relationships and thus affects the triangular love in a negative way.

Self-esteem was the last variable that significantly and positively predicted the triangular love level of university students who were involved in a romantic relationship. The literature reports that falling in love is a desirable experience, and having this experience increases the individual's self-efficacy and self-esteem (Aron, Paris, & Aron, 1995; Pines, 2010). According to Dion and Dion (1988), individuals with greater self-esteem have more compatibility with their ideal and real partners in comparison to people with low self-esteem. Similarly, high self-esteem was reported to be associated with romantic desirableness (Zeigler-Hill & Myers, 2011) and people with high self-esteem are more likely to fascinate romantic partners to themselves and establish romantic relationships (Pettijohn, Naples, & McDermott, 2010). Çanakçı (2000) emphasizes that individuals who constantly have romantic relationships have higher self-esteem in comparison to those who have never experienced a

romantic relationship. Hence, the positive contribution of higher self-esteem on university students' attitudes and perceptions about love is somewhat understandable.

RECOMMENDATIONS

The current research signifies the worth of examining relationships between triangular love and basic personality traits among young adults who were and who were not involved in a romantic relationship. The results might have some implications in practice for young adults in both couple counseling and college counseling fields. Further research also needs to verify the significance of relationships between the components of love and personality traits in terms of gender and marital status including different measures of love and personality traits. Besides, future studies considering the models of the personality of love in a cross-cultural manner should be conducted.

ETHICAL TEXT

In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed. The responsibility belongs to the author(s) for any violations that may arise regarding the article. Ethics committee approval dated 28/02/2017 and numbered 14 was obtained as a result of ethical evaluation by Mersin University Social Sciences Research and Publication Ethics Committee.

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