

RESEARCH ARTICLE

Anxiety in High School Adolescents by Gender: Friend Attachment, Ineffective Coping with Stress, and Gender in Predicting Anxiety

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ABSTRACT

Background/purpose – Anxiety is one of the most common mental health problems seen in children and adolescents. Based on this general framework, the first aim of the study is to reveal the prevalence of trait anxiety among adolescents and to determine whether this prevalence differs according to their gender. The second aim is to reveal whether adolescents' ineffective coping styles with stress, friend loyalty, and gender predict trait anxiety.

Materials/methods – Data were collected from a total of 531 adolescents (318 females; 213 males). State-Trait Anxiety Inventory, Coping Strategies Scale in Stress Experiences, and the Friend Attachment Scale were used as data collection tools.

Results – According to the findings, 18.3% of adolescents had a low level of anxiety, 65.2% were moderate, and 16.0% had a high level of anxiety. In terms of gender, 17.6% of females had a low level of anxiety, 62.3% were moderate, and 20.1% had a high level of anxiety. For the males, 18.3% had a low level of anxiety, 69.5% were moderate, and 11.3% had a high level of anxiety. This gender-based difference was shown to be significant. Another finding showed the adolescents' trait anxiety scores to be negatively correlated with friend attachment, and positive significant relationships revealed between ineffective coping styles. These variables and gender together explain 31.0% of the trait anxiety variance.

Conclusion – The findings showed the trait anxiety of female adolescents to be higher than male adolescents. In addition, attention should be paid as to whether attachment to friends and ineffective coping methods with stress are used in research and treatment processes related to trait anxiety.

Keywords – adolescents, anxiety, stress, coping, gender

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1. INTRODUCTION

Adolescence and the problems experienced during adolescence are, and will most likely continue to be, an important field of study for scientists. The importance of psychological problems and the effects of these problems on adulthood is a renowned topic of research. Adolescence is one of the most critical stages of the human lifecycle, and is known for adolescents' being enthusiastic and assertive, and what can also be quite a turbulent life stage in which depression, anger, conflict, and anxieties are frequently experienced (Görker et al., 2004). Anxiety is among the most common psychological problems faced by both younger children and as well as adolescents (Muris et al., 2017). Anxiety is defined as a state of arousal that manifests itself with physical, emotional, and mental changes in the face of a non-objective danger (Aitken, 1982; Spielberger et al., 1970), and is accepted as one of the basic emotions of human individuals. Anxiety is also described as feelings of discontent and unhappiness that occur as a result of neutral situations being perceived by individuals as a dangerous or threatening situation (Öner & LeCompte, 1983).

Anxiety, according to the general definition, is an emotion that emerges when we feel helpless when faced with a threat, and when we cannot develop a strategy or attitude to tackle the perceived danger (Freeman & Freeman, 2012). Apart from this definition, according to Baxter et al. (2013), anger is a cognitive, emotionally-based negative state (Ahmed et al., 2009) that comprises anxiety and negative thinking, and as a result, is related to the stimulation of the body. According to the two-factor anxiety theory put forward by Spielberger (1966), it is possible to consider anxiety as either "trait anxiety" or "state anxiety." Spielberger pronounced state anxiety as a process seen at a certain moment and at a certain level of severity, while trait anxiety includes the differences in revealing the severity of a certain type of reaction of a hidden route, such as potential energy in physics (Kozacioğlu, 1984). State anxiety is the type that occurs when individuals are faced with a situation perceived as undesirable and dangerous. Trait anxiety, on the other hand, is an attitude towards perceiving situations that are not concretely dangerous as a threat but present as a related emotional state (Baxter et al., 2013). According to Köknel (1995), trait anxiety is a state of dissatisfaction and unhappiness that varies in intensity and duration according to personality, and is therefore more stable and continuous than state anxiety. The fact that trait anxiety levels differ also changes the perception, understanding, and interpretation of a threatening and dangerous situation, and thereby it is evaluated differently. In addition, changes in trait anxiety level also changes the level of state anxiety (Çavuşoğlu, 1993). However, it is not possible to say that these anxiety types are completely independent of each other; studies have established moderate relations between the two anxiety types (Başarır, 1990). The reason for this is that individuals with high levels of trait anxiety are more easily hurt and likely to become pessimistic, and that these individuals experience state anxiety more frequently and intensely than others (Öner & LeCompte, 1983). Despite these definitions, trait anxiety is the more common psychological condition that can sometime acts as a protective factor against threatening situations, and long-term anxiety can also cause psychological distress that affects an individual's daily ability to function (Cole, 2014).

Symptoms such as disrupted behavior, perception and attention disorders, decreased academic success, avoidance of personal relationships, introversion, hopelessness, low self-esteem, and depression can be seen in individuals who experience trait anxiety (Cuceloglu, 2011; Kaplıkiran, 2006; Karakaya et al., 2006; Öner & LeCompte, 1983; Tumkaya et al., 2007).

As can be seen from the related studies in the literature, it is important to investigate factors that can cause trait anxiety, which is an important psychological condition.

It is known that the stresses that individuals inevitably experience in their daily lives is one of the most important factors that can cause anxiety. However, it is often not possible to eliminate all factors that may trigger stress. Therefore, the management of stressful situations is of considerable importance. In this context, coping is a process with unique dynamics in which individuals interact with their environment in order to control the negative effects of events perceived as stressful (Monteiro et al., 2018). According to Lazarus (1966) and Lazarus and Folkman (1984), when individuals are faced with stressful situations in their lives, they have to make two decisions when deciding how to deal with it.

First, they evaluate whether the stress being experienced is considered harmful or beneficial as an individual; this is called primary assessment and is a decision-making process (Ferguson et al., 1999). In other words, this is the process in which the demands on the individual and the potential effect of the resources available to them to deal with the stressful situation are evaluated. This primary appraisal includes three dimensions that affect how stress is interpreted individually: 1) The situation may be perceived as a direct threat, meaning that the stressful situation has the potential to harm the individual; 2) The experienced situation may be perceived as a loss, meaning that the stressful situation is felt as a potential loss for the individual (e.g., loss of friendship, health, self-esteem, etc.); and, 3) The state of stress may be perceived as a challenge, meaning that the stressful situation is seen as an opportunity for growth or positive potential for the individual.

The second decision to be made is dependent upon how the stress has been evaluated, and is how best to deal with the stress. These decisions are known as secondary assessment or coping strategies. According to Ferguson et al. (1999), if a person, as a result of their primary evaluation, decides that the situation presents a potential threat or loss, then this activates the secondary evaluation process, which determines what coping options or behaviors are available to deal with the stressful situation being faced. The individual's perception of a stressful situation as a threat or loss may be affected by their values, goals, the novelty of the situation to the individual, the available social support, the intensity of the situation, and whether or not the potential threat or loss can be controlled. When a stressful situation is perceived to present a potential threat or loss and the appropriate situational factors have been considered, this leads to known coping strategies being triggered (Ferguson et al., 1999). Therefore, it may be said that secondary assessments are effectively coping strategies.

People use various coping strategies to deal with situations that cause them stress. According to Lazarus (1966), these strategies are either effective and ineffective coping strategies. Lazarus and Folkman (1984) stated that an effective coping strategy is "problem-focused," whereas an ineffective coping strategy is "emotion-focused." According to these scholars, problem-focused coping strategies involve solving the problem by way of seeking rational and active means to resolve the stressful situation. These strategies include understanding and defining the problem correctly, calculating the advantages and disadvantages of potential actions to be taken, thinking about possible solutions, changing things that need to change, and learning new skills where necessary. In the problem-focused coping strategy, the individual can change both their environment and themselves as, when, and where necessary.

On the other hand, in an emotion-focused coping strategy, the individual tries to reduce the emotional distress caused by the stressful event or situation by not being directed to the stressful event or situation (Rice, 2000). The methods used here include efforts such as avoiding the problem, distancing themselves from the problem, developing selective attention, seeking the blame for the problem, minimizing the size of the problem, wishful thinking, expressing emotions, and seeking social support.

Both coping forms have advantages and disadvantages depending on what the situation is. However, in general, research tends to support the view that effective problem-focused coping is always beneficial whilst ineffective emotion-focused coping is less helpful (Folkman, 1997). University students' use of problem-solving strategies have been associated with positive outcomes such as better health and a reduction of negative effects (Dunkley et al., 2000; Sasaki & Yamasaki, 2007). On the other hand, the use of emotion-focused strategies, especially avoidance strategies, has been associated with undesirable outcomes such as declining health and increased negative impact (Pritchard et al., 2007). In addition, emotion-focused strategies such as acceptance and positive restructuring have been associated with increased psychological well-being (Scheier et al., 1994). In other studies, a positive and significant relationship was found to exist between life satisfaction, problem-focused coping, and seeking social support (Deniz, 2006; Scheier et al., 1986). Scheier et al. (1986) also found that pessimism and ineffective coping strategies were associated with denial, distancing, and focusing on stress-producing emotions. Although there is no generalized opinion, it is seen that individuals can use problem-focused-effective or emotion-focused-ineffective coping strategies depending on the nature and controllability of the problem. In this context, a positive and significant relationship is expected between ineffective coping strategies and trait anxiety in adolescents.

It is thought that one of the important factors that can reduce the negative effects of the anxiety experienced by individuals is a healthy attachment. According to attachment theory, the socioemotional relationship and bond established with parents in infancy and childhood affects future behavioral, emotional, and cognitive processes (Ainsworth, 1989; Mikulincer & Shaver, 2007). Studies have shown that adolescents who cannot establish appropriate friendships may experience emotional problems because they are not healthy and happy at a sufficient level (Sarı, 2012; Terzi & Çankaya, 2009), and that one of these emotional problems can be anxiety. It is known that trait anxiety has a negative effect on the process of bonding with friends, which is the most important element of the human environment, especially for children and in adolescents (Muris et al., 2001). Therefore, it may be said that on the one hand, the anxiety experienced in adolescents may affect friend loyalty, whilst on the other hand, adolescents who cannot develop friend loyalty experience anxiety because of this.

Adolescent friendships form a holistic process that takes shape according to their interactions with their parents, as well as their own romantic relationships and the attachments formed with their peers (Miller & Hoicowitz, 2004). When people enter new environments, start a new school, move to a new neighborhood and meet new people from these environments, thoughts about whether or not they will be accepted can trigger anxiety. Especially during adolescence, fear of being criticized or humiliated in front of others becomes prominent and anxiety can be experienced at a high level throughout this life stage (Tassin et al., 2014).

Attachment has a character that directly affects friendship relations. In this process, sincerity in relationships, owning roles, and developing relationship-specific dynamics can have a significant effect on friend loyalty (Wilkinson, 2010). The quality of the relationships established within the family from infancy to childhood to adolescence also affects the commitment of the child in relationships established outside of the family unit (Wilkinson, 2010). Especially during adolescence, the process of establishing friendships and bonding with them becomes even more important. According to Zimbardo (1977), anxiety about being included in social groups and being accepted by friends and peers increases during adolescence. Therefore, adolescents may exhibit more behaviors such as shyness and being ashamed. Separation anxiety, which is one of the foundations of this situation, is a concept shaped by attachment and commitment. All attachment styles, even those that are positive, include separation-related anxiety. Anxiety can be found even in secure attachments, and at a normal level (Ainsworth et al., 2014).

Anxiety arising from social relations in adolescents is more intense than during other life stages due to adolescence being a key developmental period. Adolescents have less ability to directly reflect these concerns like adults, and reveal this by withdrawing from society and being unable to form tight bonds (Macapinlac, 2018). Studies on the relationship between friend attachment and anxiety in adolescents have found negative significant relationships between friend attachment and anxiety (Claes, 1992; Heinze et al., 2018; Miller & Hoicowitz, 2004; Wilkinson, 2008). On the other hand, in a study conducted with a sample of 266 male and 229 female students aged between 13 and 19 years old, Wilkinson (2010) investigated the relationship between the processes of family attachment and friend attachment in adolescents and psychological states such as depression and anxiety. Wilkinson's study found that the friend attachment processes of students with low family attachment processes had a negative impact. Accordingly, findings such as anxiety and depression were encountered in negatively affected adolescents. Accordingly, a negative relationship is expected between friend attachment and trait anxiety in adolescents.

It is thought that another factor that may be effective in adolescents' trait anxiety may be their gender, as males and females often have distinctly different reactions to stressful events due to their emotional differences. Females are considered more vulnerable to distressing and painful events than males. In addition, the societies in which individuals live may expect people of different genders to behave differently in situations such as internalizing or externalizing the problems they experience. Internalization of problems reveals anxiety. Accordingly, if it is thought that females internalize problems more than males, their level of anxiety may notably increase (Wenjuan et al., 2020). In addition, gender difference is an important variable that is addressed during stressful life events, which is the basis of numerous psychological disorders from anxiety to depression (Lavoie et al., 2019). In parallel, a study by McLean et al. (2011) conducted Collaborative Psychiatric Epidemiology Studies (CPES) on a large sample of 2,013 people in the United States, from where it was revealed that females started to exhibit anxiety disorders from the age of 12 years old, and especially from the onset of puberty. They also reported that these levels were higher from the outset than those seen for males across all anxiety disorder types.

Considering the relevant literature and published studies, it is considered important to reveal the level of anxiety experienced by adolescents according to their gender, and to deal with negative coping with stress and friend loyalty, which may affect the level of trait anxiety exhibited. When the literature is examined, the number of studies in which trait anxiety, positive coping with stress, and friend loyalty are discussed together is almost non-existent.

For this reason, it is thought that the current study will help guide researchers and practitioners in terms of addressing anxiety, friend loyalty, and coping with stress, which are important psychological variables that affect school-age adolescents. Accordingly, the aim of the current study is to determine the level of anxiety exhibited by adolescents, to determine whether or not this level differs according to their gender, and also to ascertain whether or not adolescents' ineffective coping styles with stress and friend loyalty predict their trait anxiety.

To this end, answers were sought to the following research questions:

- Do trait anxiety levels (low, moderate, high) differ by gender among adolescents?
- Is there any relationship between adolescents' levels of trait anxiety and their ineffective coping styles and friendship attachment?
- Do ineffective coping styles of adolescents, their friendship attachment, and gender predict their trait anxiety?

2. METHODOLOGY

2.1. Research Model

This is a descriptive study that attempts to explore an existing situation as it is. In the study, trait anxiety is the dependent variable while coping strategies used in stressful experiences and friendship attachment are the independent variables.

2.2. Study Group

A total of 318 adolescent females (59.9%) and 213 adolescent males (40.1%) (total, $N = 531$) were included in the study group of the research. The mean age of the adolescents was 16.10 years old (.90). Of the participant adolescents, 316 (59.5%) attended Anatolian High Schools and 215 (40.5%) attended vocational high schools. The study group was reached by the easily accessible sampling method.

2.3. Instruments

2.3.1. State-Trait Anxiety Inventory (STAI-TX)

The Trait Anxiety subscale of the STAI-TX was developed by Spielberger et al. (1970) to ascertain the trait anxiety scores of adolescents and was later adapted to the Turkish context by Öner and LeCompte (1983). As a 4-point, Likert-type scale, STAI-TX is graded as *almost never*, *sometimes*, *often*, and *always*. Cronbach's Alpha internal consistency coefficient was found to be .87 for the Trait Anxiety subscale while its test-retest reliability coefficient was calculated to be .86. Karataş (2009, 2011) found internal consistency of the Trait Anxiety subscale to range from .79 to .72. Possible scores of the subscale vary between 20 and 80 points, and higher scores indicate higher levels of trait anxiety. Based on the data collected in the current study, the Trait Anxiety subscale's internal consistency coefficient was found to be .75.

2.3.2. Scale of Strategies for Coping with Stress (SSCS)

The SSCS was developed by Aysan (1988) to identify the strategies used by adolescents to cope with stress based on the five-factor scale revised by Vitaliano et al. (1987) which was originally formed by Lazarus and Folkman (1984) with seven factors in accordance with the Transactional Model of Stress. The SSCS is composed of 45 items and rated as a 5-point, Likert-type instrument (e.g., from 1 = *very suitable* to 5 = *not suitable at all*). Its subscales are

Problem Solving, Seeking of Social Support, Self-Reproach, Avoidance, and Imagination. Correlations between the factors vary between .41 and -.61. Cronbach's alpha scores of the subscales were calculated as .85, .72, .70, .74, and .70, respectively. While each subscale can be scored individually, the total scores for Problem solving and Seeking of Social Support provide the score for Effective Coping Strategy, whilst the total scores for the Self-Reproach, Avoidance, and Imagination provide the score for Ineffective Coping Strategy. The adolescents' Ineffective Coping Strategy scores in the current study were measured using this approach. Based on the data collected in the study, the internal consistency coefficient was found to be .81 for the applied measure.

2.3.3. Friendship Attachment Scale (FAS)

The FAS scale was originally developed by Armsden and Greenberg (1987), and later adapted to the Turkish context by Hortaçsu et al. (1991). The Likert-type FAS consists of 25 items rated from 1 = *always* to 5 = *never*. In the validity study, the scale was found to have three factors; Trust, Communication, and Alienation, just as in the original scale. Cronbach's alpha internal consistency coefficients of these factors were found to be .90, .68, and .73, respectively. In another adaptational study, a single-factor construct was achieved (Löker, 1999). The internal consistency coefficient for the whole scale was calculated as .92, whilst the inter-item correlation was found to be between .51 and .75. The score range of the FAS is from 25 to 125 points, with higher scores interpreted as strong friendship attachment. The internal consistency coefficient for the FAS was calculated as .86.

2.4. Procedures

The data of the research were collected from students attending different high school types in the Muğla province of Turkey. In this context, research ethics committee permission and other necessary permissions were obtained from the Muğla Directorate of National Education. Completion of the scales took approximately 10-15 minutes, with the process administered by the researchers.

2.5. Data Analysis

IBM's SPSS 23 software package was utilized for the data analysis. Chi-square test was performed to see whether trait anxiety levels differed by gender, Pearson's product-moment correlation coefficient was utilized to identify the relationships between continuous variables, and stepwise multiple regression analysis to reveal whether the independent variables predicted the dependent variable. Finally, gender, which is a real, discontinuous variable, was entered in the analysis as 0 and 1 and handled as a dummy variable.

In the study, trait anxiety scores were divided into three dummy categories of low, moderate, and high. One of the methods used for making a continuous variable score a dummy categorical variable is to utilize the mean and standard deviation values of the variable. However, the prerequisite is to determine whether the scores have a normal distribution. To this end, Kurtosis and Skewness coefficients of normal distribution measures were calculated and found to be -.086 and -.256, respectively. This finding indicates that the data were normally distributed. Consequently, within this score range of 27.00 to 66.00, it was decided that the ranges of 27.00-39.30, 39.31-54.69, and 54.70-66.00 corresponded to low, moderate, and high levels of anxiety, respectively. The upper limit of error margin was accepted as .05.

3. RESULTS

Findings concerning the difference of adolescents' trait anxiety levels (low, moderate, and high) by gender are presented in Table 1.

Table 1. Chi-square: Differences in trait anxiety levels by gender

		Anxiety level			Total
		Low	Moderate	High	
Gender	Female	56 17.6%	198 62.3%	64 20.1%	318 100.0%
	Male	41 19.2%	148 69.5%	24 11.3%	213 100.0%
Total		97 18.3%	346 65.2%	88 16.6%	531 100.0%
		100.0%	100.0%	100.0%	100.0%

As can be seen in Table 1, of the adolescent females, 56 (17.6%) had low, 198 (62.3%) had moderate, and 64 (20.1%) had high levels of trait anxiety. Of the adolescent males, 41 (19.2%) had low, 148 (69.5%) had moderate, and 24 (11.3%) had high levels of trait anxiety. In total, of the participant adolescents, 97 (19.2%) had low, 346 (69.5%) had moderate, and 88 (11.3%) had high levels of trait anxiety. The difference caused by gender was found to be significant ($\chi^2_{(2)} = 7.248, p < .05$). The adolescent females were found to have low and high levels of trait anxiety, whereas the adolescent males had moderate levels of trait anxiety.

Descriptive findings concerning the adolescents' scores of trait anxiety, friendship attachment, and ineffective coping, as well as the relevant correlation coefficients are given in Table 2.

Table 2. Trait anxiety, friendship attachment, and ineffective coping style

Variables	<i>M</i>	<i>SD</i>	1	2	3	α
Trait anxiety	46.87	7.69	1			.72
Friendship attachment	94.68	14.51	-.36**	1		.86
Ineffective coping style	79.12	16.20	.40**	-.10*	1	.81

N = 531, * $p < .05$, ** $p < .01$

Table 2 shows the relationships between the variables. Accordingly, there is a negative significant correlation between the trait anxiety scores of adolescents and their friend attachment scores ($r = -.36, p < .05$). On the other hand, a positive and significant relationship was revealed between trait anxiety and ineffective coping with stress ($r = .40, p < .05$). Finally, a negative and significant relationship was found between friend attachment and ineffective coping style with stress in adolescents ($r = -.10, p < .05$).

Findings regarding the prediction of trait anxiety scores by adolescents' friendship attachment, ineffective coping styles, and gender are presented in Table 3.

Table 3. Stepwise multiple regression analysis: Prediction of trait anxiety scores

Independent variables	<i>R</i>	ΔR^2	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Constant	-----	-----	86.244	2.694	-----	32.011	.000
Ineffective coping style	.395	.156	.174	.017	.366	10.067	.000
Friendship attachment	.510	.260	-.216	.021	-.408	-10.464	.000
Gender	.555	.308	-3.666	.609	-.234	-6.020	.000

$$R^2 = .308, F(3, 527) = 78.130, p < .000$$

As seen in Table 3, all three variables were found to be significant predictors in explaining the variance of trait anxiety scores among the adolescents. Of the variance of the trait anxiety scores, 15.6% was explained by the ineffective coping style scores in the first step, 9.4% by the scores of friendship attachment in the second step, and 4.8% by gender in the third step. All three variables together explained 30.8% of the variance of adolescents' trait anxiety scores [$F(3, 527) = 78.130, p < .000$].

4. DISCUSSION

According to the first finding of the research, the adolescent females were found to have significantly higher trait anxiety scores than the adolescent males at all levels (low, moderate, and high). Furthermore, gender was revealed to be a significant predictor of trait anxiety. While other studies in the literature have concluded there to be no difference in trait anxiety scores by gender (e.g., Aral & Başar, 1998; Karataş, 2011), most of the published research has found that adolescent females have higher levels of trait anxiety than adolescent males (Başaran et al., 2009; Bozkurt, 2004; Kelly et al., 2008; Özyürek & Demiray, 2011; Pamuk et al., 2014; Pharoah, 2002). The reason for this difference, as argued by Bozkurt (2004), may be that adolescent females feel that they are under greater pressure, do not openly express their anxieties and fears, and are less inclined to self-criticize themselves compared to adolescent males, whereas adolescent males are considered to be more social and at ease. Hence, the difference revealed in the current study is explained by social gender roles. In terms of social gender roles in Turkey, and therefore in terms of the current study, responsibilities for raising children as well as caring for their partner and the families of both themselves and their partner are generally attributed to adult females, hence expectations regarding their own academic achievement, as well as that of their partner, children, and the families of their partner, and also tasks related to their working life, social life, and private life can all trigger trait anxiety among adult females. In the case of adolescent females, academic responsibilities and responsibilities related to the running of the family household, as well as expectations regarding the family may also have been affective in their revealed higher levels of trait anxiety.

According to the study's second finding, ineffective coping styles were found to positively correlate with and were a significant predictor of the adolescents' trait anxiety scores. Several research findings achieved in regard to the correlation between ineffective coping styles and types of anxiety (trait anxiety, state anxiety, test anxiety, etc.) coincide with this finding of the current study (e.g., Capulcuoglu & Gunduz, 2013; Ozdemir, 2013). Adolescents have an inherent need to develop their roles and identities in society, as well as to adapt to their own physical developments and changes, and to act accordingly. While they are expected to act like an adult, they are often still treated like a child within their own

family and immediate circle. When adding the expectation of academic achievement, adolescence, which is already recognized as a stressful life stage, may become even more complicated and problematic. Coping effectively with so many problems or stressors and problem solving may become impossible where there are time pressures, other priorities, conflicts, or simply due to invoking personal choices. When adolescents are unable to use problem solving as a coping method, they naturally encounter the emotional consequences of not coping with the stress. In other words, ineffective, emotion-focused coping styles come into play. Although emotion-focused coping styles may provide a form of comfort in the short term, they cannot trigger a lasting impact similar to problem solving, and which therefore positively affects their levels of trait anxiety.

Finally, a negative significant correlation was found between the adolescents' scores of trait anxiety and friendship attachment, and friendship attachment was a significant predictor of trait anxiety. In a study performed with 9-12-year-old children, Sumer and Sendag (2009) found negative significant correlations between secure parental attachment and trait anxiety. Dilmac et al. (2009), in their study performed with undergraduate emerging adults, concluded that individuals with anxious and avoidant attachment styles had higher levels of trait anxiety, In another study, a negative significant correlation was found between secondary school students' levels of test anxiety and secure attachment, and a positive significant correlation between preoccupied, dismissive, and fearful attachment (Kaya & Savrun, 2015).

As can be understood, the relevant studies have addressed the relationships between attachment styles and trait anxiety rather than those between friendship attachment and trait anxiety during adolescence. No similar studies were observed in the literature review. However, according to Cok (1993), close friendships established by adolescents can importantly contribute to coping with adolescent-specific stressors and developing a secure and valuable level of self-understanding. Thus, it is anticipated that adolescents who can establish close friendships that help them to feel safe, good about themselves, and valued will experience trait anxiety less frequently. Moreover, youngsters who can establish secure friendships and receive the support of their friends and family during their adolescence, as a recognized stressful and troublesome transitional life stage, are more likely to be able to socialize healthily, feel themselves to be more competent and successful, to improve their talents, and experience greater self-confidence (Elbir, 2000; Sali, 2010). Accordingly, friendship attachment can be evaluated as a significant force among adolescents against trait anxiety and consequent factors that may adversely affect their psychological well-being.

5. SUGGESTIONS

It could be suggested that the participant teacher-mentors in the current study were merely offering their perspective on their own experiences as to whether or not they had undertaken mentor training.

- Future research could be conducted to determine whether or not the reason for the higher trait anxiety levels of female students compared to males relates to their biological sex or assumed gender roles.
- Psychosocial programs related to the high level of anxiety found in favor of adolescent females in most studies could be implemented by structuring.
- Considering the positive relationship established between ineffective coping strategies and anxiety, seminars and psychoeducational programs could be planned

and implemented in order to increase adolescents' stress-related coping skills. In addition, psychosocial training programs based on coping with anxiety, which are offered as suggestions, could be integrated into stress coping programs.

- Regarding the positive effect of friend loyalty on anxiety, sportive, cultural and social activities that are recognized to strengthen friend loyalty could be organized in schools.
- Considering that friend loyalty depends on a secure attachment with an adolescent's mother or female guardian, training on commitment and addiction could be developed and applied within family-based training.
- Future studies could aim to examine variables related to more specific issues such as epidemic, disconnection from social environment, and digital communication, etc., that may have an effect on friend loyalty, coping with stress, and anxiety levels in adolescents.
- In particular, the Turkish Ministry of National Education may recommend the implementation of preventive programs to address processes that are known to trigger a constant state of anxiety in adolescents, and to develop activities aimed at coping with stress and developing friendships.

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