Analysing the Trait Anxiety and Locus of Control of Undergraduates in Terms of Attachment Styles

Bülent DİLMAÇ*, Erdal HAMARTA**, Coşkun ARSLAN**

Abstract

The aim of this research is to analyse the trait anxiety and locus of control of undergraduates in terms their attachment styles. This research has been conducted in accordance with general screening model. The target population of the research is constituted of 480 undergraduates. Pearson moments multiplication correlation coefficient technique, analysis of variance and Tukey test have been employed for analysing the data. As a result of the research, it has been found out that trait anxiety and the locus of control of negative self model and negative others model are positively correlated. Another symptom of the research is the finding that the trait anxiety point averages of the individuals of preoccupied and fearful attachment is higher than those of secure attachment style. Also, the point averages of trait anxiety of fearful attachment individuals have been determined to be expressively higher than the individuals who are dismissing attachment. It has been found out that the locus of control point averages of secure attachment undergraduates is expressively lower than those of preoccupied and fearful attachment undergraduates.

Key Words

Attachment Styles, Locus of Control, Trait Anxiety, Undergraduate Students

* *Correspondence*: Bülent Dilmaç, PhD, Selcuk University, Faculty of Education Meram, 42090 Konya/TURKEY. E-mail: bdilmac73@hotmail.com

** Asist. Prof. Dr., Ahmet Kelesoglu Education Faculty, Department of Education Sciences, Selcuk University, Meram 42090, Konya-Turkey / E-mail: ehamarta@selcuk.edu.tr

*** Asist. Prof. Dr., Ahmet Kelesoglu Education Faculty, Department of Education Sciences, Selcuk University, Meram 42090, Konya-Turkey / E-mail: coskunarslan@selcuk.edu.tr

As a universal construct, anxiety is a depressing emotion that every-body experiences regardless of culture, religion, race, gender, or age (Arı, 1989). When the works intended to define anxiety are examined, it was clear that anxiety has been defined as the condition of being stimulated that manifests itself with physical, emotional, and mental alterations the individual experiences against a non-objective danger (Aiken, 1976; Spielberg, Gorsuch & Lushene, 1970). It may also be described as the condition of fear and agitation that is felt under a threat. Anxiety is resulted from a conflict and frustration in the individual and mostly mirrors an internal stress and discomfort of an unknown cause. Anxiety appears when the individual distinctly feels in conscious that there is a disorder between his/her ego design and real life; and, is a reaction that is caused by the individual urging to alter his/her ego design a little. Anxiety generally causes emotions such as agitation, inner stress, insecurity, discomfort, scare, fear, confusedness, and panic within the individual. In some circumstances, anxiety might be on a neurotic degree as well as normal degree (Aydın & Dilmaç, 2004).

In general, people who are in anxiety state tend to exaggerate and twist the events that they experience by overrating them (Gençtan, 1981). It is possible to classify the anxiety experienced by individuals into two different but related types. The first is situational anxiety and the other one is trait anxiety. *Situational anxiety* appears when we face an undesi-red and a dangerous situation. On the other hand, *trait anxiety* happens when there is no objective state or reason for being anxious; or when such a reason exists but the relative anxiety state is disproportionally diuturnal and intensive (Ocaktan, Keklik, & Çöl, 2002). The increase of the anxiety state causes uncertainty future and therefore a state of inability to decide what to do. In this state, Individuals might enter in a state of a baseless apprehension that something bad will happen to them (Çakmak & Hedevanlı, 2005).

The attachment theory presents important information on understanding anxiety with its theoretical and investigative results. According to Bowlby (1982), the origin of adult anxiety is based on childhood experiences and attachment processes occupies an important place on understanding anxiety. Bowlby (1982) has defined attachment as "a strong desire to establish a contact or seek intimacy with a figure when the individual is scared, tired, or ill." Bowlby (1973; 1982) has declared

the functions of attachment relations as (1) being close to the one who cares for (i.e., mother), (2) using mother as a secure base that offers support when exploring the climate and initiating new things, and (3) being a shelter that enables the baby to rely on the mother for comfort, protection, and support. In the state of discomfort, being doubtful about the availability of the attachment figure, causes anxiety in children According to Bowlby, anxiety levels in children are drastically affected by the attachment figures (Cassidy, Lichtenstein-Phelps, Sibrava, Thomas, & Borkovec, 2009). For this reason, the development of secure adult relations is connected with the quality of the attachment between the mother and the child (Ceyhan, 2006).

The development of healthy individuals is closely related to having a healthy childhood. The mother–child relation and its quality is considerably important on the child's growth and development as a healthy individual both in mental and physical terms. This relation, initiated from babyhood, is at first directed to meet the basic needs of the baby. However, as the child grows, it is important on the child's emotional development and to takes place in the society as a health individual (Kayahan, 2002). Ainsworth (1989) indicates that the attachment styles formed in childhood also affect the relationships in adulthood. Studies regarding the attachment styles on adulthood have been initiated by Hazan and Shaver in the 1980's. For adulthood attachment styles, Hazan and Shaver (1987) have proposed a model that consists of three parts: secure, anxious/doubtful, and avoidant. However, in recent years, adulthood attachment styles studies focus on another model called the quart model that Bartholomew has proposed (Bartholomew & Horowitz, 1991; Bartholomew & Shaver, 1998). This model involves a quart attachment structure of secure, dismissing, fearful, and preoccupied attachments which appear from the intersection of positive–negative self and others. A positive-self model involves the feelings of self respect and lovability without needing any external approval, whilst the negative-self model includes the need of others' approval for having a positive self (anxiety). Having others model positive means having no abstention for seeking support and intimacy in close relations and generally having positive expectations from others, whilst having others model negative describes having negative expectations from others (avoidant) (Figure 1).

Positive
Model of Other

SECURE   PREOCCUPIED

Positive   Negative
Model of Self   Model of Self

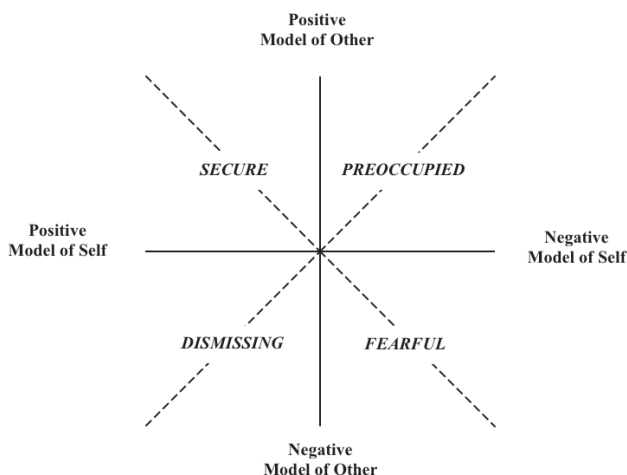DISMISSING   FEARFUL

Negative
Model of Other

Figure 1: Two-dimensional four-category model of adult (Bartholomew & Shaver, 1998)

Secure attachment style is the combination of positive self (low anxiety) and positive others (low avoidance) models. Individuals who demonstrate secure attachment style make positive appreciations towards self and others. In their relations, they have high levels of sincerity and fondness; and they also rely on others for help in case of need. Dismissing attachment style is the combination of positive self (low anxiety) and negative others (high avoidance) models. Dismissing individuals have high self respect; they are assertive and they try to establish control on their relations. However, they are week on expressing fondness and sensibility. They do not relay on others for help, nor do they help others in return. Preoccupied attachment style is the combination of negative self (high anxiety) and positive others (low avoidance) models. They are characterized with high levels of dependency. Preoccupied individuals try to acquire a positive self respect through others; but tend to control the style between individuals. They tend to blame their selves on being rejected by others, and therefore they see others positively and their selves negatively. Fearful attachment style is the combination of negative self (high anxiety) and negative others (low avoidance) models. Fearful individuals tending to consider others negatively, they have low self respect and insecure in social sense (Bartholomew & Horowitz, 1991; Bartholomew & Shaver, 1998).

Attachment styles are determined with early childhood experiences do not only underlie future relationships; but also they might be the base and starting point of cognitive emotional and stimulation processes which lie behind depression and anxiety (Simonelli, Ray & Pincus, 2004). When the literature on attachment is examined, generally accepted argument is that the unsecure attachment style (dismissing, doubtful – (fearful, preoccupied)) carries risk factors for pathologic symptoms (Brumariu & Kerns, 2008). As a result of the longitudinal study, Warren, Huston, Egeland, and Sroufe (1997) have found that the unsecure attachment style children demonstrated anxiety disorders more frequently than secure attachment style children. Studies both in normal and pathologic samplings indicate that insecure individuals, compared to those who have secure attachment style, have higher levels of anxiety and depressive symptoms (Bifulco, Moran, Ball, & Bernazzani, 2002; Cassidy et al. 2009; Ceyhan, 2006; Hamarta, 2004; Durmuşoğlu, Hamarta, Deniz & Öztürk, 2006; Kobak, Sudler, & Gamble, 1991; Mitchell & Doumas, 2004; Mikulincer & Sheffi, 2000; Muris, Meesters, van Melick, & Zwambag, 2001; Prigerson, Shear, Bierhals, Zonarich, & Reynolds, 1996; Simonelli, Ray & Pincus, 2004; Sümer & Güngör, 1999; Weems, Berman, Silverman, & Rodriguez, 2002).

When an individual defines him/herself, the position he/she places him/herself against situations having a role in his/her life, constitutes the locus of ego control (Rotter, 1966). The concept of control, as well as being a concept that is discussed as a dimension of personality development, also composes a piece of basic personal differences process that occurs on learning process (Çivitçi, 2007). In this context, the "control" concept is being expressed with concepts such as control perception, self sufficiency, learned strangeness/weakness, and causative attribution. Even if they are being expressed differently, it is still being considered that these are the different interpretations of the relations between "individual –event – result" trios of the same locus of control (Skinner, 1996). The locus of control perception is related with causality clarification and responsibility attribution; it expresses where the individual seeks and tries to find the reasons of the events (Korkut, 1991; Bacanlı, 2002). Rotter defines locus of control as, the individuals' inclination to affiliate the good or bad happenings that affect him/herself to variables such as his/her own abilities, traits, faith, or other strong people. Individuals who believe that the happenings that affect them are rather in

their own control are characterized as internal locus of controlled, while those who believe that their lives are in the control of other forces than their selves are characterized as external locus of controlled (Dönmez, 1986; Rotter, 1966; Tümkaya, 2000). Research show that internal locus of controlled individuals, compared to external locus of controlled ones, spend rather more time on intellectual and academic activities and their success at school is higher. Internal locus of controlled individuals represent individuals that resist negative effects on a larger scale, that reacts strongly when their personal freedom is limited, that have an independent personality, and that are impulsive and entrepreneurial (Yeşilyaprak, 2004; Yeşilyaprak, 1990).

Confirming the Rotter's locus of control concept, Bowlby (1982) suggests the working models that take shape with childhood experiences of the individuals; however, research studies that directly examine the correlation between attachment and locus of control are quite few (Mickelson, Kessler & Shaver, 1997). When the literature in this field is examined, the traits attributed to internally controlled individuals [responsible, having the ability to solve problem effectively, organized, systematic, resistant, self-assured, success oriented (Yeşilyaprak, 2004)] shows similarities with the traits of individuals of secure attachment style. In the light of these explanations, it is assumed that the individuals with secure attachment style, compared to individuals with unsecure attachment style, are more internal locus of controlled. Also the findings of the literature review are such as to support this assumption (Hexel, 2003; Marsa et al. 2004; McMahon, 2007; Mickelson et al. 1997).

When taking into account that the anxious individuals having difficulty to realistically evaluate the happenings they experience and thus affecting their daily tasks negatively (Gençtan,1981; Aydın & Tekinsav-Sütçü, 2007), the determination of the trait anxiety levels according to attachment styles that are shaped with early childhood experiences, will draw attention to the importance of the relation between mother and child. Also due the fact that the research which discusses attachment and locus of control together is quite limited, it is expected to contribute to the literature in this field. In the light of the explanations made above, the aim of this research is to analyze undergraduates in terms of trait anxiety and attachment styles of their locus of control. In accordance with this aim, the sub problems of this research are described below.

1. Is there a significant correlation between the attachment styles (anxiety – avoidance) of the undergraduates and their trait anxiety and locus of control?

2. Is the trait anxiety levels of the undergraduates significantly differing in accordance with their attachment styles (secure, dismissing, preoccupied, and fearful)?

3. Is the locus of control of the undergraduates significantly differing in accordance with their attachment styles (secure, dismissing, preoccupied, and fearful)?

Method

Participants

This research used survey model and the target population of the study consisted of the undergraduates of Faculty of Education, Faculty of Science, Faculty of Letters, and Faculty of Technical Education of Selcuk University. The participants were chosen with random cluster sampling method among undergraduates attending to the above mentioned faculties. The ages of the undergraduates ranged between 17 and 26 years ($\bar{x}$= 20.87 ss = 2.36). Of the sample, 267 of them are females and 213 are males.

Instruments

The Trait Anxiety Inventory: The sub test measuring trait anxiety of the State-trait Anxiety Inventory, developed by Spielberger, Goorsuch and Lushene (1970, cited in Öner & LeCompte, 1983) was used in the study. This scale is composed of 20 items and is being used to determine how the individual generally feels about himself, independently from the situations and conditions he experiences. The internal consistency of the Trait Anxiety Scale has been found between .83 and .87 and its translation to Turkish and adaption works have been completed by Oner and LeCompte (1983). The retest test reliability has been found between .71 and .83. The adaptation of the Trait Anxiety Scale into Turkish has been realized in two techniques as experimental concept acceptability and criteria acceptability (Öner & LeCompte, 1983). The high scores obtained from the scale indicate higher levels of trait anxiety.

The Rotter Locus of Control Scale: The scale developed by Rotter (1966) includes 29 items that aim to evaluate the position of the individuals generalized control expectations on the internal–external dimension or, in other words, the general expectations and beliefs the individuals have regarding reinforces being in the control of internal or external forces (luck or faith). Every item in the scale is being evaluated over two choices that are shown with the letters a and b. The higher scores signify the belief of external locus of control (Savaşır & Şahin, 1997). The validity and reliability studies of the scale have been performed by Dağ (1991). The correlation coefficient acquired as a result of retest – test reliability has been found .83, and the Cronbach Alpha internal consistency coefficient has been found to be .71. According to scale validity results, while a significant correlation of -.29 (p < .001) has been found between the Rosenbaum's Learned Strength Scale and internal control; an significant correlation of .21 has been ascertained between external locus of control and the general symptoms of the Symptom Check List (SCL-90-R).

The Inventory of Experiences on Close Relationships (IECR): The inventory of experiences on close relationships was developed by Brennan, Clark and Shaver (1998). The scale is composed of two dimensions that are characterized as avoidance and anxiety. It is constituted from a total of 36 items of which 18 of it are on avoidance dimension and 18 on anxiety. On the two dimensional attachment model, while the low scores obtained from anxiety and avoidance dimensions beckons positive model of self and positive model of others; the higher scores imply negative self and negative others model (Brennan et al., 1998). As the participants can be evaluated in the basis of this two dimensions, by using the scores they obtain from 2 dimensions, they can also be classified in one of the four categories that are determined via cluster analysis and shows concordance with the quart attachment model (secure attachment, dismissing attachment, preoccupied attachment and fearful attachment) that Bartholomew and Horowitz (1991) suggests. By this way, two types of measurement can be gathered from the scale, as dimensions based on progressive measurement and categorical classification bases. The scale is evaluated by considering each item on a Likert seven point type assessment (1 = I totally do not agree, 7 = I totally agree). The IECR was adapted to Turkish by Sümer and Güngör

(1999) in a research with Turkish undergraduate students and the factor structure as a four-category model of attachment was confirmed. On the work that has been carried out by Sümer (2006) that compares the Relations Survey, the Relationship Scales Survey and the Inventory of Experiences on Close Relationships which are used to measure the attachment styles and levels; also the reliability and validity testing of the IECR has been done. In the research it has been found that the scale is in a two factor structure (anxiety and avoidance). It has been found that the reliability (internal consistency) coefficients, is .86 for anxiety dimension and .90 for avoidance dimension.

Analysis of Data

In order to determine the undergraduates' attachment styles, the IECR has been employed in the research. While analyzing the research, Pearson product-moments correlation coefficient has been employed in order to determine the correlation between the scales anxiety and avoidance scores, and trait anxiety and locus of control. By taking the arithmetic means of the anxiety and avoidance subscales from the IECR as basis, the undergraduates with low anxiety and low avoidance has been classified as secure attachment type, those with low anxiety and high avoidance has been classified as dismissing attachment, those with high anxiety and low avoidance has been classified as preoccupied attachment and those with high anxiety and high avoidance has been classified as fearful attachment style. The undergraduates who are connected with the discriminate functions that appears as a result of the discriminate analysis which is conducted in order to determine the consistency of the allocations made from two dimensions into the quart model, have been classified into the style which the highest scores has been obtained among the attachment styles. At the end of the analysis, from the 480 undergraduates that constitutes the sample, 159 has been classified as secure attachment, 93 of them as dismissing attachment, 148 of them as fearful attachment and 80 of them as preoccupied attachment. For determining whether the trait anxiety and locus of control of the undergraduates, differentiates or not in an significant level according to attachment styles, one-way analysis of variance; and in order to clarify between which attachment styles the differentiation is, Tukey test have been employed.

Results

In accordance with the first sub problem of the research, in order to show the relation between trait anxiety, locus of control and the avoidance and anxiety dimensions of attachment, at first, Pearson product moments correlation is used and the result are shown at table 1.

Table 1
The Relation among University Students' Trait Anxiety, Locus of Control and Attachment (Anxiety and Avoidance)

	Anxiety	**Avoidance**
Trait Anxiety	.274*	.214*
Locus of Control	.198*	.147*

*$p<.05$

When table 1 is examined, it is found that there is a positive correlation with the anxiety scores of the undergraduates and attachment avoidance and anxiety sub dimension. Also, there is a positive correlation between locus of control, and avoidance and anxiety.

In accordance with the second sub problem of the research, a one way variance analysis and a Tukey post hoc test are conducted in order to determine whether the trait anxiety averages significantly differentiates or not in terms of attachment styles (secure, dismissing, fearful and preoccupied) of the undergraduates, and the results have been shown in Table 2.

Table 2
The comparison of University Students' Trait Anxiety According to Attachment Styles

Attachment Styles	N	$\bar{x}$	Ss	F	Results of Tukey Test
1.Secure	159	46.80	4.44		
2. Dismissing	93	48.11	5.17	13.97*	3>1**, 4>1**, 4>2**
3. Preoccupied	80	49.28	5.33		
4. Fearful	148	50.55	5.90		

*$p<.05$

When Table 2 is examined, as a result of the variance analysis used in order to determine whether the trait anxiety averages significantly differentiates or not in terms of attachment styles (secure, dismissing,

fearful and preoccupied) of the undergraduates, it is found that the undergraduates trait anxiety ($F_{(3-480)}$=13.97, p<.05) does differentiate significantly. In order to determine the source of the differentiation of the undergraduates' trait anxiety averages based on attachment styles, Tukey post hoc test was conducted. As a result of the analysis, the averages of trait anxiety of fearful and preoccupied (p<.01) attachment types individuals have been found to be significantly higher than the individuals who are secure attachment typed (p<.01). Also, the averages of trait anxiety of fearful attachment typed undergraduates were found to be significantly higher than the undergraduates who are dismissing attachment typed (p<.01).

In accordance with the third sub problem of the research, a one way variance analysis and a Tukey post hoc test were conducted in order to determine whether the locus of control averages significantly differentiates or not in terms of attachment styles (secure, dismissing, fearful and preoccupied) of the undergraduates, and the results are shown in Table 3.

Table 3
The comparison of University Students' Locus of Control According to Attachment Styles

Attachment Styles	N	$\bar{x}$	Ss	F	Results of Tukey Test
1.Secure	159	10.52	3.84		
2. Dismissing	93	11.10	3.03	3.84*	1<3**, 1<4**
3. Preoccupied	80	11.88	3.65		
4. Fearful	148	11.74	3.81		

*p<.05

As a result of the variance analysis used in order to determine whether the locus of control averages significantly differentiates or not in terms of attachment styles (secure, dismissing, fearful and preoccupied) of the undergraduates, it was found that the undergraduates locus of control ($F_{(3-480)}$=3.84, p<.05) does differentiate significantly. As a result of the Tukey post hoc test conducted in order to determine the differentiation of the locus of control averages according to the attachment styles, the locus of control averages of the secure attachment styled individuals were found to be significantly low than those of preoccupied (p<.05) and fearful (p<.05) attachment styled individuals.

Discussion

The sub problems of the research are composed of three main questions. When considering the symptoms of the research, it exhibits two basic symptoms. First of these is the manifestation of the correlation between attachment and anxiety and the second is the correlation between anxiety and locus of control. In order to avoid tautology, the argument is based on these two basic symptoms. In the research, a positive significant correlation was found between trait anxiety and, anxiety and avoidance dimensions (self and others model). As a result of the variance analysis that is based on the two dimensions being categorically classified, the trait anxiety of the individuals who are fearful and preoccupied attached, was found to be higher than those of secure attachment styled ones. Also, the trait anxiety of fearful attachment type individuals were found to be significantly higher than the individuals who are dismissing attachment typed. On the two dimensional attachment model, while the low scores obtained from anxiety dimension beckons positive model of self and the higher scores imply negative self; the low scores from avoidance dimension shows positive others model and high scores indicate negative others model (Brennan et al., 1998). These results show that especially undergraduates with secure attachment (positive self – positive others) and dismissing attachment (positive self – negative others) have lower trait anxiety than the undergraduates with other attachment styles. This result indicates that both secure and dismissing attachment typed individuals have positive self and that there is a negative correlation between trait anxiety and the individual's positive attitude to him/herself. Having a positive attitude towards self results in lesser anxiety levels. Furthermore, anxiety on high levels cause emotional states such as stress, doubt, discomfort, fear; resulting in the individual not relying to him/herself and his/her climate (Aydın & Dilmaç, 2004; Geçtan, 1981) and being in a state expecting to get harm from other people (Çakmak & Hedevanlı, 2005). These traits show similarities with the traits of the individuals of unsecure attachment styles (preoccupied and fearful). According to the attachment theory (Bowlby, 1982, 1988, Cassidy, et al. 2009), on depressed and stressed situations, the unavailability of the attachment figure or being in doubt of the accessibility of the attachment figure, that is lack of the secure base, might cause anxiety and consequently the development of unsecure attachment. Both the positive correlation between trait anxiety and the negative self and negative others model of the two dimensional attachment model; and the

symptom found as a result of the categorical classification, show similarities with the symptoms of the previous research (Bifulco, et al., 2002; Cassidy et al., 2009);; Hamarta, 2004; Durmuşoğlu et al., 2006; Kobak et al., 1991; Mitchell & Doumas, 2004; Mikulincer & Sheffi, 2000; Muris et al., 2001; Prigerson et al. 1996; Simonelli et al., 2004; Sümer & Güngör, 1999; Weems et al., 2002). When all these explanations and studies are taken into consideration it might be conceivable that on dealing with anxiety states, a positive self attitude will be effective on experiencing lesser trait anxiety, due to its features of self respect and the belief of success.

In the research, a positive significant correlation was found between the locus of control and anxiety and avoidance dimensions of attachment. At the locus of control scale, having high scores implies external locus of control and having low scores indicates internal locus of control. The result found in the research shows that the attachment behavior of the individuals with external locus of control exhibits more anxiety and avoidance, while the individuals with internal locus of control demonstrate lesser anxiety and avoidance. When examining the locus of control of the undergraduates in accordance with the quart attachment model (secure, dismissing, fearful and preoccupied), the locus of control score averages of the secure attachment styled individuals were found significantly lower than those of preoccupied and fearful attachment styled individuals. This result shows that the individuals of secure attachment style have more internal locus of control than those individuals who are preoccupied and fearful attachment style.

Rotter defines locus of control as the individuals' inclination to affiliate the good or bad happenings that affect him/herself to variables such as his/her own abilities, traits, faith, or other strong people. Individuals who believe that the happening that affects them is rather in their own control are characterized as internal locus of controlled, while those who believe that their lives are in the control of other forces than their selves are characterized as external locus of controlled (Dönmez, 1986; Rotter, 1966; Tümkaya, 2000). The research studies show that being external locus of controlled is related with negative ego concept (McClun & Merrell, 1998) and social avoidance (Geist & Borecki, 1982). As for the traits attributed to internally controlled individuals are being responsible, having the ability to solve problems effectively, being organized, systematic, resistant, self-assured and success oriented (Yeşilyaprak,

2004). The traits attributed to internally controlled individuals show similarities with the traits of the individuals of secure attachment style. The traits of the individuals having secure attachment of feeling comfortable about intimacy on close relations, being in an expectation that the other people will generally be approving and react decently, having internalized the value sense of self (Bartholomew & Horowitz, 1991; Bartholomew & Shaver, 1998) might explain the fact that the undergraduates with secure attachment style are internally locus of controlled. Also research studies based on this subject indicate that the individuals having secure attachment style are internal locus of controlled (Mickelson et al. 1997; Marsa et al. 2004; Hexel, 2003; McMahon, 2007).

The fact that trait anxiety and attachment styles of the locus of control being correlated significantly, shows the importance of conscious parent attitudes on the development of individuals who are self confident and take responsibility of their behaviors Due to this reason, including works related "secure attachment" on parenthood education programs might significantly contribute on the development of healthy individuals. Also due to the fact that research studies that examine the correlations between trait anxiety – attachment styles and locus of control – attachment styles is quite few, the conductions of new research studies both in normal and clinical groups might provide significant contributions to the field.

References/Kaynakça

Aiken, L. R. (1976). Update on attitudes and other affective variables in learning mathamatics. *Review of Educational Research*, *46*, 293-311.

Ainsworth, M. D. S. (1989). Attachment beyond infancy. *American Psychogist*, *44*, 709-716.

Arı, R. (1989). Üç büyük psikolojik yaklaşımda anksiyete. *Selçuk Üniversitesi Eğitim Fakültesi Dergisi*, *3*, 195-219.

Aydın, E. & Dilmaç, B. (2004). Matematik kaygısı. M. Gürsel (Ed.), *Eğitime ilişkin çeşitlemeler* içinde (s. 231-241). Konya: Eğitim Kitabevi.

Aydın, A. & Tekinsav-Sütçü, S. (2007). Ergenler İçin Sosyal Kaygı Ölçeğinin (ESKÖ) geçerlik ve güvenirliğin incelenmesi. *Çocuk, Gençlik ve Ruh Sağlığı Dergisi*, *14* (2), 79-89.

Bacanlı, H. (2002). *Gelişim ve öğrenme*. Ankara: Nobel Yayınevi.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*, 226-244.

Bartholomew, K., & Shaver P. R. (1998). Methods of assessing adult attachment do they converge? In J. A. Simpson, & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25-46). New York: The Guilford Press.

Bifulco, A., Moran, P. M., Ball, C., & Bernazzani, O. (2002). Adult attachment style I: Its relationship to clinical depression. *Social Psychiatry and Psychiatric Epidemiology*, *37*, 50-59.

Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger.* New York: Basic Books.

Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.

Brennan, K., Clark, C., & Shaver, P. (1998). Self-report meuasure of adult attachment: An integrative overview. In J. Simpson, & W. Rholes (Ed.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford.

Brumariu, L. E., & Kerns, K. A. (2008). Mother-child attachment and social anxiety symptoms in middle childhood. *Journal of Applied Developmental Psychology*, *29* (5), 393-402.

Cassidy, J., Lichtenstein-Phelps, J., Sibrava, N. J., Thomas, C. L. Jr., & Borkovec, T. D. (2009). Generalized anxiety disorder: Connections with self-reported attachment. *Behavior Therapy*, *40*, 23-38.

Ceyhan, A. (2006). Üniversite öğrencilerinin geçmişte yaşadıkları ayrılık kaygısının öğrenilmiş güçlük, kaygı ve psikolojik belirtileri yordama düzeyi. *Kuram ve Uygulamada Eğitim Bilimleri*, *6* (1), 53-73.

Çakmak, Ö. & Hedevanlı, M. (2005). Eğitim ve fen-edebiyat fakülteleri biyoloji bölümü öğrencilerinin kaygı düzeylerinin çeşitli değişkenler açısından incelenmesi. *Elektronik Sosyal Bilimler Dergisi*, *4* (14), 115-127.

Çivitçi, A. (2007). Erken ergenlik döneminde içsel-dışsal denetim odağı boyutları ve cinsiyete göre mantık dışı inançlar. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, *14* (1), 3-11.

Dağ, İ. (1991). Rotter'in İç-Dış Kontrol Odağı Ölçeği (RİDKOÖ)'nin üniversite öğrencileri için güvenirliği ve geçerliği. *Psikoloji Dergisi*, *7* (26), 10-16.

Dönmez, A. (1986). Denetim odağı temel araştırma alanları. *Ankara Üniversitesi Eğitim Bilimleri Dergisi*, *18* (1-2), 259-280.

Durmuşoğlu, N., Hamarta, E., Deniz, M. E., & A.Öztürk. (2006, Eylül). *Üniversite öğrencilerinin bağımlı kişilik özelliklerinin bağlanma stilleri açısından incelenmesi.* 15. Eğitim Bilimleri Kongresi'nde sunulan bildiri, Muğla Üniversitesi, Muğla.

Geist C. R., & Borecki, S. (1982) Social avoidance and distress as a predictor of perceived locus of control and level of self-esteem. *Journal of Clinical Psychology*, *38* (3), 611-613.

Gençtan, E. (1981). *Çağdaş yaşam ve normal dışı davranışlar*. Ankara: Maya Matbaacılık.

Hamarta, E. (2004). *Üniversite öğrencilerinin yakın ilişkilerindeki bazı değişkenlerin (benlik saygısı, depresyon ve saplantılı düşünme) bağlanma stilleri açısından incelenmesi*. Yayımlanmamış doktora tezi, Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü, Konya.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511-524.

Hexel, M. (2003). Alexithymia and attachment style in relation to locus of control. *Personality and Individual Differences*, *35*, 1261-1270.

Kayahan, A. (2002). *Annelerin bağlanma stilleri ve çocukların algıladıkları kabul ve reddin çocuk ruh sağlığı ile ilişkileri.* Yayımlanmamış yüksek lisans tezi, Ege Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.

Kobak, R. R., Sudler, N., & Gamble, W. (1991). Attachment and depressive symptoms during adolescence: A developmental pathway analysis. *Development and Psychopathology*, *3*, 461-474.

Korkut, F. (1991). İlkokul öğrencilerinin kendilerine ilişkin bazı değişkenlerin denetim odakları üzerine etkisi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *6*, 135-141.

Marsa, F., Reilly, G., Murphy, P., Sullivan, M., Cotter, A., & Hevey, D. (2004). Attachment styles and psychological profiles of child se offenders in Ireland. *Journal of Interpersonal Violence*, *19* (2), 228-251.

McClun, L. A., & Merrell, K. W. (1998) Relationship of perceived parenting styles, locus of control orientation, and self-concept among junior high age students. *Psychology in the Schools*, *35* (4), 381-390.

McMahon, B. (2007). *Organizational commitment, relationship commitment and their association with attachment style and locus of control.* Unpublished master dissertation, Master of Science in Psychology, Georgia Institute of Technology, Atlanta.

Mickelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality Social Psychology*, *73* (5), 1092-1106.

Mikulincer, M., & Sheffi, E. (2000). Adult attachment style and cognitive reactions to positive affect: A test of mental categorization and creative problem solving. *Motivation and Emotion*, *24* (3), 149-174.

Mitchell, S. H., & Doumas, D. (2004). The relationship between adult attachment style and depression, anxiety, and self-esteem. Presented at The Rocky Mountain Psychological Association Annual Conference. Retrieved July 24, 2008, from http://familystudies.boisestate.edu/pdf/Doumas2.pdf.

Muris, P., Meesters, C., Van Melick, M., & Zwambag, L. (2001). Self-reported attachment style, attachment quality, and symptoms of anxiety and depression in young adolescents. *Personality and Individual Differences*, *30*, 809-818.

Ocaktan, M. E., Keklik, A., & Çöl, M. (2002). Abidinpaşa sağlık ocağında çalışan sağlık

personelinde spielberg durumluk ve sürekli kaygı düzeyleri. *Ankara Üniversitesi Tıp Fakültesi Dergisi*, *55* (1), 21-28.

Öner, N. & LeCompte, A. (1983). *Durumluk-sürekli kaygı envanteri el kitabı.* İstanbul: Boğaziçi Üniversitesi Yayınları.

Prigerson, Holly G., Shear, M. K., Bierhals, A. J., Zonarich, D. L., & Reynolds III C. F. (1996). Childhood adversity, attachment and personality styles as predictors of anxiety among elderly caregivers. *Anxiety*, *2*, 234-241.

Rotter, J. B. (1966). Generalized expectancies for internal vs. external control of reinforcement. *Psychological Monographs*, *80*, 1-28.

Savaşır, I. & Şahin, N. H. (1997). *Bilişsel-davranışçı terapilerde değerlendirme: Sık kullanılan ölçekler.* Ankara: Türk Psikologlar Derneği Yayınları.

Skinner, E. A. (1996). A guide to constructs of control. *Journal Peronality and Social Psychology*, *71*, 549-570.

Spielberger, C. D., Gorsuch, R. L., &Lushene, R. E. (1970). *Manual for state and anxiety inventory.* Palo Alto, CA: Consulting Psychologists.

Simonelli, L. E., Ray, W. J., & Pincus A. L. (2004). Attachment models and their relationship with anxiety, worry and depression. *Counseling and Clinical Psychology Journal*, *1*, 107-118.

Sümer, N. & Güngör, D. (1999). Yetişkin bağlanma stilleri ölçeklerinin Türk örneklemi üzerinde psikometrik değerlendirmesi ve kültürlerarası bir karşılaştırma. *Türk Psikoloji Dergisi*, *14* (43), 71-106.

Sümer, N. (2006). Yetişkin bağlanma ölçeklerinin kategoriler ve boyutlar düzeyinde karşılaştırılması. *Türk Psikoloji Dergisi*, *21*, 1-22.

Tümkaya, S. (2000). İlkokul öğretmenlerinin denetim odağı ve tükenmişlikle ilişkisi. *PAÜ. Eğitim Fakültesi Dergisi*, *8*, 1-8.

Warren, S. L., Huston, L., Egeland, B., & Sroufe, L. A. (1997). Child and adolescent anxiety disorders and early attachment. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*, 637-644.

Weems, C. F., Berman, S. L., Silverman, W. K., & Rodriguez, E. T. (2002). The relation between anxiety sensitivity and attachment style in adolescence and early adulthood. *Journal of Psychopathology and Behavioral Assessment*, *24*, 159-168.

Yeşilyaprak, B. (1990). Denetim odağının belirleyicileri ve değişime ilişkin araştırmalar: Bir eleştirel değerlendirme. *Psikoloji Dergisi*, *7* (25), 41-52.

Yeşilyaprak, B. (2004). Denetim odağı. Y. Kuzgun & D. Deryakulu (Eds.), *Eğitimde bireysel farklılıklar* içinde (s. 239-258). Ankara: Nobel Yayınevi.