

# Relationship between Parenting Style and High School Students' Anxious Thoughts: A Case Study in Iran

Nazanin Mostafavi<sup>1</sup>

<sup>1</sup> General Practitioner, Member of Iran Medical Council and Iran General Practitioners Association, Mashhad, Iran

Correspondence: Nazanin Mostafavi, Iran Medical Council, Mashhad, Iran. E-mail: dr.mostafavi.nazanin.2023@gmail.com

Received: November 9, 2023 Accepted: February 20, 2024 Online Published: March 4, 2024

doi:10.5539/jedp.v14n1p108

URL: <http://doi.org/10.5539/jedp.v14n1p108>

## Abstract

Parenting styles are variables that affect their children's anxious thoughts. The present study aimed to examine the relationship between parenting styles with anxious thoughts of the students in selected high schools of Mashhad, Iran. A quantitative methodology in form of a correlational design was employed in this research, which comprised two main variables including parenting styles and Iranian teenagers' anxious thoughts. To address the research objective, 180 teenagers who were students at some schools in Mashhad, Iran, and their parents, completed the study questionnaires which included Baumrind parenting styles Scale (1971) and the Anxious Thoughts Inventory (AnTI) designed by Wells (1994). The analysis of the data obtained from implementing the questionnaires was performed through SPSS25 software in two sections: descriptive and inferential (Pearson Correlation Coefficient and regression analysis, i.e. ANOVA). The results showed that there was a significant relationship between anxious thoughts and the three parenting styles. Also, the relationship between the authoritarian parenting style and the symptoms of anxious thoughts ( $r = -0.731$ ) is significant in a negative way. On the other hand, it is observed that there is a positive correlation between authoritarian parenting style and anxious thoughts ( $r = 0.511$ ). Finally, it is seen that there is a positive correlation between permissive parenting style and anxious thoughts (0.461), ( $p < /01$ ). It can be concluded that parenting styles can strongly predict anxious thoughts and determine 0.544 of variances of the anxious thoughts.

**keywords:** Parenting Style, Anxious Thoughts, authoritative, authoritarian, permissive

## 1. Introduction

There is no denying the importance of parents in the lives of their children (Mohammadi & Zandasta, 2018). One of the significant concerns that has drawn the interest of education experts for a long time is the relationship between parents and children. A child's bond with their surroundings is first established by their family (Rezaei, Noori, Rezaei, Fotoohi, & Mohammadvali, 2018). Doctors, psychologists, and philosophers are totally dedicated to this position; they believe that parents are the foundation of every individual's development (Mohammadi & Zandasta, 2018).

Research on how families shape children's behavior and character reveals that families are among the most significant influences on a child's development. The growth of a kid is influenced by the complex activity of parenting style, which involves unique techniques and behaviors that can have an individual or combined effect (Khajeh & Shayof, 2015; Mohammadi & Zandasta, 2018). The family framework for raising children is shaped by parenting style and the underlying behaviors that go along with it. It also creates the environment and circumstances necessary for the growth and development of children (Yaffe, 2021).

Warmth and control are the two facets of parental parenting, as demonstrated by Baumrind (1971; 1991, & 2013). Baumrind's study has led him to distinguish between three parenting philosophies: permissive, authoritarian, and authoritative. These philosophies differ in their emphasis on control and warmth. Parents who are permissive tend to be very affectionate and have little self-control. These parents give their kids the least amount of discipline and let them act however they choose. The least accepting and warmest parents are those that are authoritative; they also exhibit strong behavioral control. These parents are extremely rigid and follow their own boundaries rather than the laws. Warmth and behavioral control are highly exhibited by authoritarian parents (Baumrind, 2013; Mohammadkhani et al., 2014; Rezaei et al., 2018).

An essential component of all anxiety is worry, which is characterized by negative and uncontrollable thoughts. Understanding the fundamentals of worry will probably be much aided by research on the subject of anxiety. Research of this kind depend on the creation of tools that measure various aspects of anxiety (Wells, 1994). Although it has evolved significantly since the 1980s, the idea of worry has a long history in the field of anxiety disorders (Morejón, Vázquez-Morejón, & Muñoz-Fernández, 2020). With increasing awareness of its significance in Generalized Anxiety Disorder (GAD), excessive or pathological concern has been identified as a fundamental component of GAD (APA, 1987). These psychological illnesses are of great importance because to the high incidence of GAD in the population, its correlation with the frequency of use of healthcare services (Wittchen, 2002), and its significant cost to society (Chisholm et al., 2016).

Moreover, concern has been demonstrated to be a common component of many diseases, particularly anxiety and depressive disorders. According to Bailey and Wells (2016), some research has even suggested that worry may have a causal role in the development and maintenance of anxiety. Anxiety's cognitive component, distinct from its bodily activation component, is worry, which can be defined as a pattern of recurring intrusive and negative thoughts about what might happen in the future. Uncontrollably worrying is a crucial component of pathological anxiety (Morejón et al., 2020). Metacognition, or the cognitive processes involved in thought regulation, is intimately linked to this feeling of uncontrollability and is a key concept in the emergence and persistence of a number of psychological disorders (Gkika, Wittkowski, & Wells, 2018; Morejón et al., 2020).

Studies have indicated that the ways in which parents raise their children have a substantial negative psychological impact on them (Mohammadi & Zandasta, 2018; Yaghoubi Rad, 2014). According to the evolutionary theory of anxiety, a child's anxiety symptoms are correlated with their style of control, how their parents adopt them, and their behaviors (Rezaei et al., 2018). According to Tabatabaeirad and Akbari Balootbangan (2017), an authoritarian parenting style may make children feel more anxious. Furthermore, students with great parental support are less worried and more suited to their surroundings, according to Yaghoubi Rad (2014). Parents that adopt a child-friendly parenting style tend to have children with low levels of anxiety and obsessive-compulsive symptoms, whereas students whose parents adopt an authoritarian approach have high levels of anxiety and depression (Mohammadi & Zandasta, 2018). Rezaei et al. (2018) discovered a favorable correlation between the students' anxious thoughts and three parenting styles.

Despite a few studies in this area, the results are conflicting when it comes to whether parenting styles influence their kids' anxious thoughts—especially when both parents and kids are included in the research (Yaffe, 2021). It is uncommon for parenting styles to be associated with anxious thoughts, despite the fact that previous studies have connected parenting practices to a variety of consequences. Furthermore, fewer studies have looked at the consequences of parenting styles as a whole as opposed to (or in addition to) the characteristics and behaviors that make them up.

Furthermore, an increasing amount of current research has linked different parenting approaches and styles to internalizing issues in teenagers. However, the research in question were carried out with varying theoretical backgrounds, and the reported conclusions are inconsistent (Gorostiaga, Aliri, Balluerka, & Lameirinhas, 2019). According to those studies, parenting styles that are authoritative or authoritarian are generally associated with lower levels of anxiety in children and adolescents, while parenting styles that are authoritarian are associated with higher levels of anxiety in offspring (Pinquart, 2017; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016). Thus, the purpose of the current study was to investigate the relationship between parenting styles and anxious thoughts in high school students in Iran, both as a whole and in relation to specific parenting style dimensions.

## 2. The Research Objective and Hypothesis

The goal of this study is to examine the relationship between the three distinct parenting philosophies identified by Baumrind (authoritative, authoritarian, and permissive) and anxious thoughts among high schoolers in Iran. This is in keeping with the body of research that indicates a relationship exists between various parenting styles and an individual's cognitive, psychological, social, emotional, and behavioral development. Besides, there is inconsistency in the previous findings related to Iran and this research is an endeavor to explore the relationship between parenting styles of Iranian parents and anxious thoughts among high schoolers in Iran

Bearing this in mind, the following hypothesis was formulated in this study:

- $H_0$ : There is no significant relationship between parenting styles and anxious thoughts among teenagers in Iran.
- $H_1$ : There is a significant relationship between parenting styles and anxious thoughts among teenagers in Iran.

### 3. Theoretical Framework: Parenting Styles and Anxious Thoughts

#### 3.1 Worry and Anxious thoughts

According to Wells (2000) and Wells & Matthews (1994), metacognition is a key concept in the explanation of the emergence and persistence of psychological disorders. Metacognitive knowledge and metacognitive regulation are the two components of metacognition, which is defined as the cognitive processes involved in the evaluation and management of thought (Wells, 2006).

The Self-Regulatory Executive Function Theory's theoretical foundation provided the main driving force behind its clinical emergence as a construct intimately associated with psychological disease (Wells, 2000; Wells & Matthews, 1994; 1996). This theory's central thesis is that the inclination toward and activation of a cognitive pattern are connected to the susceptibility to and maintenance of disorder. This pattern, called the Cognitive Attentional Syndrome (CAS), consists of attentional techniques of danger monitoring, perseverative thinking in the form of worry/rumination, and coping actions that do not provide adaptive learning experiences that change dysfunctional beliefs. The theory essentially regards the CAS as a factor that impedes recovery from typically temporary negative emotional experiences and advocates for exploring common cognitive aspects across psychiatric disorders (Morejón et al., 2020; Wells, 2006).

The patient's metacognitive knowledge (beliefs) regarding anxiety, rumination, and attention, as well as the employment of dysfunctional coping mechanisms, many of which are metacognitive in origin, give rise to the CAS. Based on the S-REF theory, the metacognitive model of Generalized Anxiety Disorder provides a metacognitive explanation of the internal psychological variables that lead to, initiate, and maintain pathological anxiety (Morejón et al., 2020; Wells, 2006).

To distinguish between worry and metacognitions regarding worry, the GAD model divides worry into two categories. Concerns about relationships, the social environment, and physical occurrences are referred to as Type 1 worry, and concerns regarding worry and cognitive functioning are referred to as Type 2 worry (e.g. assessing worry as unmanageable and detrimental). In order to evaluate various forms of anxiety and associated metacognitive conceptions, the anxious thoughts inventory (AnTI) has been proposed (Morejón et al., 2020; Wells, 2006).

#### 3.2 Parenting Styles

According to Darling and Steinberg (1993), a parent's overall parenting style is regarded as a trait that is constant over time and creates the emotional and environmental framework for raising children and socialization. Baumrind first proposed three major general types of parenting styles by combining the parental aspects of warmth and control (responsiveness and demandingness, respectively). These three types were then enlarged into four categories (Baumrind, 2005).

These four parental configuration prototypes are as follows: the permissive style (low in demandingness and high in acceptance, practicing lax control, avoiding punishing, and maintaining an emotional closeness); the authoritarian style (highly demanding and low in responsiveness, exerting strict control, avoiding negotiating, tending to use punishment, and providing warmth); and the authoritative style (highly demanding and responsive, exerting consistent behavioral control, granting autonomy, using reasoning, and providing warmth) (Baumrind, 2005; Yaffe, 2020). The fourth form, which was later discovered, is typically described as a neglectful or uninvolved parenting style that is neither demanding nor responsive (Baumrind, 2005; Maccoby & Martin, 1983).

#### 3.3 Parenting Styles and Adolescents' Anxiety Disorders

Yaffe (2021) cites a number of research that show a connection between children's fear and parental over-control and low parental approval. Strong evidence suggests that parental control manifestations are linked to anxiety issues in children. Less study has looked at the consequences of parenting styles as a whole as opposed to (or in addition to) their component behaviors and aspects in order to investigate the relationship between parenting and children's anxiety. These studies typically discovered an inverse relationship between the levels of anxiety experienced by children and adolescents and the authoritative and authoritarian parenting styles; the former was linked to lower levels of anxiety in offspring, while the latter was linked to higher levels (Manoochehri & Mofidi, 2014; Panetta et al., 2014; Piquart, 2017; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016). Several of these research also showed how the frequencies of different anxiety disorders and anxiety sensitivity in kids and teenagers were influenced differently by authoritative and non-authoritative parents (Panetta et al., 2014; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016).

It is possible to draw the conclusion that anxious children and adolescents are more likely to perceive their parents' dominant parenting style as non-authoritative (i.e., authoritarian, permissive, or uninvolved) than authoritative, given that the majority of those studies use self-report parenting style indexes used in correlational and cross-sectional research designs. Evidence suggests that parenting styles and their impacts on children's emotional and behavioral outcomes may be moderated by culture (e.g., to lessen the negative effects of authoritarian parenting practices and styles on the child's emotional well-being) (Lansford et al., 2014). However, in a variety of developmental circumstances including children's internalizing and externalizing behavior problems, including anxiety, authoritarian parenting appears to be the cross-culturally authoritative style (Pinquart, 2017; Pinquart & Kauser, 2018).

As a result, non-authoritative parents—who frequently use excessive, harsh, or inconsistent control—are more likely to raise children and adolescents with anxiety disorders. Conversely, authoritative parenting has been linked to decreased developmental psychopathology, which has also been demonstrated to operate as a buffer against children's anxiety (Yaffe, 2021).

Yaffe (2021) cites a number of research that show a connection between children's fear and parental over-control and low parental approval. Strong evidence suggests that parental control manifestations are linked to anxiety issues in children. Less study has looked at the consequences of parenting styles as a whole as opposed to (or in addition to) their component behaviors and aspects in order to investigate the relationship between parenting and children's anxiety.

These studies typically discovered an inverse relationship between the levels of anxiety experienced by children and adolescents and the authoritative and authoritarian parenting styles; the former was linked to lower levels of anxiety in offspring, while the latter was linked to higher levels (Manoochchri & Mofidi, 2014; Panetta et al., 2014; Pinquart, 2017; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016). Several of these researches also showed how the frequencies of different anxiety disorders and anxiety sensitivity in kids and teenagers were influenced differently by authoritative and non-authoritative parents (Panetta et al., 2014; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016).

It is possible to draw the conclusion that anxious children and adolescents are more likely to perceive their parents' dominant parenting style as non-authoritative (i.e., authoritarian, permissive, or uninvolved) than authoritative, given that the majority of those studies use self-report parenting style indexes used in correlational and cross-sectional research designs. Evidence suggests that parenting styles and their impacts on children's emotional and behavioral outcomes may be moderated by culture (e.g., to lessen the negative effects of authoritarian parenting practices and styles on the child's emotional well-being) (Lansford et al., 2014). However, in a variety of developmental circumstances including children's internalizing and externalizing behavior problems, including anxiety, authoritarian parenting appears to be the cross-culturally authoritative style (Pinquart, 2017; Pinquart & Kauser, 2018).

As a result, non-authoritative parents—who frequently use excessive, harsh, or inconsistent control—are more likely to raise children and adolescents with anxiety disorders. Conversely, authoritative parenting has been linked to decreased developmental psychopathology, which has also been demonstrated to operate as a buffer against children's anxiety (Yaffe, 2021).

#### **4. Previous Studies**

Zeevi-Cousin and Lavenda (2023) looked into how parenting's cognitive component—being receptive to many viewpoints—affects children's anxiety. The relationship between parental openness to diverse viewpoints and child anxiety has been shown to validate the mediating function of a hostile or coercive parenting style. Nonetheless, there was no substantial correlation found between child anxiety and engaged/supportive parenting.

The impact of parenting styles on the anxiety and depression of teenagers was investigated by Li, Qian, and Wang (2023). It was discovered that the emotional warmth of the father's parenting style could influence the child's anxiety level, but the mother's approach had no discernible effect. Additionally, there was a negative and indirect correlation between sadness and the emotional warmth style of both parents. Furthermore, there was a significant direct and favorable impact of both the over-protective and rejection parenting styles on anxiety and despair.

The mediating impact of anxiety between parenting styles and academic performance among primary school pupils was investigated by Albulescu, Labar, Manea, and Stan (2023). It was discovered that pupils' performance in math and literature was negatively connected with parents' inadequate supervision, and there was a negative correlation between academic achievement and anxiety levels.

The study conducted by Rajabi Jourshari et al. (2022) investigated the correlation between assertiveness and parenting styles in regulating children's anxiety and self-esteem. The findings showed that among the parenting philosophies, authoritative and permissive parenting styles significantly impacted assertiveness. According to the overall impacts, parenting styles that are permissive or authoritative account for 0.22 and 0.20 of the differences in assertiveness. Additionally, the findings demonstrated that assertiveness was not significantly impacted by an authoritarian parenting style.

A narrative study of the connection between anxiety disorders in children and adolescents and parenting has been done by Yaffe (2021). Children's anxiety was found to be correlated with parenting styles, with physical punishment and various forms of parental control having the biggest impact. Anxiety-stricken children and teenagers are more likely to have grown up with non-authoritative parents (authoritarians, for example), who frequently use excessive, strict, or erratic discipline. Furthermore, a few circumstances when parenting habits cause anxiety in kids have also been highlighted.

Wang et al. (2021) looked at the relationship between depressive parents' various parenting styles and the anxiety and depression of their children. Researchers discovered that while children raised by indifferent parents were more likely to experience depression than those raised by undifferentiated parents, youth with care-autonomy parents had a decreased risk of both anxiety and depression. In general, care-autonomy parenting may reduce children's depression risk, while indifference parenting may raise that risk.

The association between recalled unfavorable parenting styles and maladaptive schemas, trait rage, and signs of anxiety and depression was examined by Shute, Maud, and McLachlan (2019). It was shown that rejecting fathering has an indirect impact on depressive symptoms. In addition, the majority of parenting's emotional consequences were direct. Trait anger was positively impacted by rejecting fathering, and depressive and anxious symptoms were positively impacted by controlling mothering. Anxiety symptoms showed a negative correlation with controlling fathering.

In 2019, Gorostiaga, Aliri, Balluerka, and Lameirinhas conducted a literature review on the relationship between parental socialization techniques and suicidal thoughts, depression, and anxiety. The findings demonstrate an inverse relationship between internalizing symptoms in adolescents and parental warmth, behavioral control, and autonomy giving. On the other hand, teenage anxiety, depression, and suicide thoughts are positively correlated with parental psychological control and strict control.

Mohammadi and Zandasta (2018) looked into how parental parenting styles could influence pupils' anthropometric ideas and future ruminants in Iran. Three phases of anxiety and rumination were assessed, along with one stage of parenting style. The findings demonstrated that parenting styles had a substantial impact on students' anxiety levels by 6.7% and on their futuristic rumination by 35.87%, indicating that parenting styles have an impact on children's mental and intellectual strains. The findings also indicated that parents who employed more successful parenting styles would see a decrease in schoolchildren's anxiety. This suggests that parents who discipline their children well will shield their children from psychological stress.

Rezaei, Noori, Rezaei, Fotoohi, and Mohammadvali (2018) investigated the connection between students' levels of anxiety and parenting styles. Their findings demonstrated a strong and positive correlation between the students' anxious thoughts and parenting styles—authoritative, authoritarian, and permissive. Furthermore, a strong and positive correlation was found between the students' anxious thoughts and their parents' permissive parenting style. Twenty percent of variations in the dependent variable—*anxious thoughts*—were explained by the independent variable.

Malakar (2018) investigated how parenting style affected adolescents' test anxiety and sensitivity to anxiety. The results indicated that the highest means for test anxiety and anxiety sensitivity were associated with an authoritarian parenting style. Additionally, there was no statistically significant difference in test anxiety and stress perception between male and female parents. In addition, the children's levels of test anxiety and anxiety sensitivity varied greatly due to the different parenting styles. They came to the conclusion that the best parenting style prioritizes autonomy and reason.

## **5. Methodology**

### *5.1 Research Method*

Since this research aimed at examining the relationship between parenting styles and teenagers' anxious thoughts among selected Iranian high-schoolers, the research design is descriptive in which data is collected via questionnaires. Besides, this study is correlational by nature as the relationships between the study variables were explored without controlling or manipulating any of them (Bloomfield & Fisher, 2019). Therefore, a quantitative

methodology in form of a correlational design was employed in this research, which comprised two main variables including parenting styles and Iranian teenagers' anxious thoughts.

## 5.2 Research Instruments

### 5.2.1 Baumarind Parenting Styles Scale (1971)

The initial form of this questionnaire has 30 items, which was designed and made by Baumarind in 1971. This questionnaire measures parents' parenting styles in three factors: permissive, authoritative, and authoritarian in a 5-point Likert scale (completely agree (1), somewhat agree (2), somewhat disagree (3), disagree (4), completely disagree (5)). A separate score is obtained by adding the scores of the items related to each style and dividing it by the number of questions. The retest reliability of this questionnaire has been reported as 0.69 for the permissive component, 0.77 for authoritarian and 0.73 for authoritarian (Ashrafi, Qanawati, Makondi, Mousavi and Mohammadi Majd, 2014). In the present study, Cronbach's alpha was 0.73 for the permissive component, 0.79 for authoritative, and 0.75 for authoritarian.

### 5.2.2 The Anxious Thoughts Inventory (AnTI)

In this study, the Persian Version of the anxious thoughts inventory (AnTI) was used which was designed originally by Wells (1994) as a multi-dimensional measure of worry. It aimed at capturing the distinction between content domains of worry and between non-metacognitive (Type1) and metacognitive (Type2) concerns. The AnTI is a 22-item self-report measure consisting of three subscales: social worry, health worry, and meta-worry. The social worry subscale consists of nine items, health worry six items, and meta-worry seven items (Wells, 2006). Alpha coefficients for the scale have been reported (Wells, 1994) as 0.84 for social worry, 0.81 health worry, and 0.75 for meta-worry and test-retest reliability showed correlations of 0.76 (social worry), 0.84 health worry, and 0.77 (meta-worry). This is a dispositional self-report measure of multiple dimensions of generalized worry. Each question has a scale of four. "Almost never", "sometimes", "most of the time" and "almost always". The Persian version of this the test has been examined before showing high reliability. It is admitted by Morejón et al. (2020) that the AnTI (Wells, 1994) is one of the instruments most recognized for assessment of worry because it focuses on analyzing worry content and assesses different types of worries.

## 5.3 The Study Sample and Data Collection Procedure

The population of this study included all students who studied in the academic year 2023-2024 in some selected high schools (cycle 2) in District 6 of Mashhad, Iran. To reach a sample, in this study, the instructions of Krejcie and Morgan (1970) was followed for sampling. According to official records, a number of 340 students had been registered in these schools, and taking into account Krejcie and Morgan's (1970) table, a number of 181 could be the true representative of the population. After sending the questionnaires of the study in form of Google Doc link via email, and social media platforms of the schools as well as the ones distributed in person, a total number of 180 questionnaires were valid for the purpose of analysis as some were submitted incomplete and discarded accordingly. Therefore, 180 teenagers, and their parents, completed the study questionnaires. The execution time had no limitations. According to the current research plan, in order to analyze the data, the descriptive and inferential statistics methods were used to test the study hypotheses.

## 6. Results and Findings

As it is shown in Table 1, 65% of the participants were females versus 35% males. Majority of the respondents were married with a rate of 82.8% while only a small portion reported that they were either a single parent or divorced, i.e. 17.2%. as for age, while totally 24.4% of the participants were between 20 and 34 years old, 75.5% of them were 35 years old and more. Regarding education, majority of the respondents held a bachelor (44.4%), while 13.9% had a master and a small portion of 2.2% had PhD. Those who had a high school diploma and an associate degree with rates of 20.6 and 18.9, respectively. In other words, most of the participants in this study had done their post-secondary studies (roughly 80%).

Table 1. Demographic Information of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Gender</b>	Male	63.0	35.0	35.0	35.0
	Female	117.0	65.0	65.0	100.0
<b>Marital Status</b>	Married	149.0	82.8	82.8	82.8
	Single parent-Divorced	31.0	17.2	17.2	100.0
<b>Age</b>	20-24	9.0	5.0	5.0	5.0
	25-29	22.0	12.2	12.2	17.2
	30-34	13.0	7.2	7.2	24.4
	35-39	74.0	41.1	41.1	65.6
	40 and above	62.0	34.4	34.4	100.0
<b>Education</b>	High school diploma	37.0	20.6	20.6	20.6
	Associate degree	34.0	18.9	18.9	39.4
	Bachelor	80.0	44.4	44.4	83.9
	Master	25.0	13.9	13.9	97.8
	PhD	4.0	2.2	2.2	100.0
	<b>Total</b>	180.0	100.0	100.0	

\*N=180.

In order to test the hypothesis of the research, correlation coefficient and regression were used and the results are presented in Tables 2 and 3. The correlation coefficients of parenting style with the symptoms of anxious thoughts indicate the existence of significant relationships between anxious thoughts and the three parenting styles. The results show that the relationship between the authoritarian parenting style and the symptoms of anxious thoughts ( $r = -0.731$ ) is significant in a negative way and with 99 percent certainty ( $p < /01$ ). On the other hand, it is observed that there is a positive correlation between authoritarian parenting style and anxious thoughts ( $r = 0.511$ ), ( $p < /01$ ). Finally, it is seen that there is a positive correlation between permissive parenting style and anxious thoughts (0.461), ( $p < /01$ ).

Table 2. Correlation coefficients of anxious thoughts with parenting styles

	Authoritative	Permissive	Authoritarian
Anxious thoughts	-0.731 **	0.461 **	0.511**

\*\* The level of significance is  $P < 0.01$ .

Based on the results of the Analysis of Variance (ANOVA), it can be concluded that parenting styles can strongly predict anxious thoughts at the significance level of  $p < 0.01$ . Overall, parenting styles explain and determine 0.544 of the anxious thoughts. The beta coefficient of Authoritative, authoritarian, and permissive are - 0.688, 0.171, and - 0.110. Among the three parenting styles, only authoritative parenting style has a significant and strong prediction with 99% certainty (sig 0.000), as presented in Table 3.

Table 3. regression analysis of anxious thoughts according to parenting styles

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R square	Adjusted R square
	B	Std. Error	Beta				
Authoritative	- 0.901	0.079	- 0.688	- 10.378	0.000		
Authoritarian	0.211	0.150	0.171	1.374	0.169	0.544	0.536
Permissive	- 0.124	0.127	- 0.110	- 0.926	- 0.350		

## 7. Conclusion and Discussion

Overall, in this study, consistent with previous literature, it was found that there is a significant relationship between anxious thoughts and the three parenting styles. IN further details, anxious thoughts have a significant positive relationship with authoritarian and permissive parenting styles and a significant negative relationship with authoritative parenting style. This means that parenting styles can strongly predict anxious thoughts and that authoritative parents raise children with low anxious thoughts. The results of this study are consistent with the previously conducted studies. It has been shown that authoritative parents have the lowest warmth and acceptance, and high levels of behavioral control (Baumrind, 2013; Mohammadkhani et al., 2014; Rezaei et al., 2018).

Bearing this in mind, the authoritative and the authoritarian parenting styles are inversely related to children's and adolescents' anxieties, with the authoritative style associated with lower levels of anxiety and the authoritarian style associated with higher levels of anxiety in offspring (Pinquart, 2017; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016). Moreover, the findings of this study confirm that anxious children and adolescents are more likely to experience their parents' dominant parenting style as non-authoritative (i.e. authoritarian, permissive, or uninvolved) rather than authoritative, as reported previously in the literature (Panetta et al., 2014; Timpano et al., 2015; Yaffe, 2018; Yazdani & Daryei, 2016).

Overall, it can be mentioned that authoritative parenting is associated with lower developmental psychopathology, which constitutes a protecting factor against children's anxiety (Yaffe, 2021). In fact, more effective parenting style by parents would reduce the anxiety of students in schoolchildren and such parents can keep their children away from psychological pressure if they deal with their offspring in an orderly manner. The authoritative style, based on the rationality of the behaviors and emphasis on rational justification of behaviors, reduces the anxiety and thought of high mental stress.

## 8. Implications

The results found in this study could shed light on ambiguities regarding the impact of parenting style in a country like Iran, where the topic is under-researched. As such, based on the findings that authoritative parents could have children with less anxious thoughts, it seems the findings can benefit the psychologists and clinicians in order to adopt the best strategies to aid parents adjust their rearing practices. Moreover, the results can be considered useful for the researchers in the field as the findings in this study prove the theoretical models proposed on the effect of parenting style on children's anxious thoughts.

## 9. Limitations and Recommendations

This research faced some limitations; firstly, it was conducted only in one school district in Mashhad, Iran, which means the findings cannot be generalized to a wider audience. Besides, the study is only correlational to explore the relation between the study variables, which means other research methods and designs could be adopted to triangulate the data, such as interviews, observation, and the like. For future studies, exploring parenting styles and their relationship with anxious thoughts among students from other age categories, such as those in elementary school, or junior high school is highly recommended. Moreover, future research is recommended to explore the relationship between parenting style and variables other than the anxious thought among the students.

### Funding

None.

### Informed Consent

Obtained.

### Provenance and Peer Review



Not commissioned; externally double-blind peer reviewed.

### Data Availability Statement

The data that support the findings of this study are available on request.

### Competing Interests Statement

The author declares that there are no competing or potential conflicts of interest.

### References

- Albulescu, I., Labar, A. V., Manea, A. D., & Stan, C. (2023). The Mediating Role of Anxiety between Parenting Styles and Academic Performance among Primary School Students in the Context of Sustainable Education. *Sustainability*, 15(2), 1539. <https://doi.org/10.3390/su15021539>
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., Revised (DSM-III-R)).
- Ashrafi, S. S., Ghanavati, M., Mousavi, S. Z., & Mohammadi Majd, H. (2014/1392). The relationship between parenting styles and primary school students' physical and relational aggression. *Quarterly Journal of Family and Research*, 10(4), 23-50.
- Baumrind, D. (2013). Effective parenting during the early adolescent transition. In *Family transitions* (pp. 111-163). Routledge.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The journal of early adolescence*, 11(1), 56-95. <https://doi.org/10.1177/0272431691111004>
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental psychology*, 4(1p2), 1. <https://doi.org/10.1037/h0030372>
- Baumrind, D. (2005). Patterns of parental authority and adolescent autonomy. *New Directions for Child and Adolescent Development*, 2005(108), 61-69. <https://doi.org/10.1002/cd.128>
- Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association*, 22(2), 27-30. <https://doi.org/10.33235/jarna.22.2.27-30>
- Gkika, S., Wittkowski, A., & Wells, A. (2018). Social cognition and metacognition in social anxiety: A systematic review. *Clinical Psychology & Psychotherapy*, 25(1), 10-30. <https://doi.org/10.1002/cpp.2127>
- Gorostiaga, A., Aliri, J., Balluerka, N., & Lameirinhas, J. (2019). Parenting styles and internalizing symptoms in adolescence: a systematic literature review. *International journal of environmental research and public health*, 16(17), 3192. <https://doi.org/10.3390/ijerph16173192>
- Khajeh, N., & Shayof, D. (2015). The predictive role of parenting styles in emotional intelligence of students. *Iran Journal of Nursing*, 28(97), 66-76. <https://doi.org/10.29252/ijn.28.97.66>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610. <https://doi.org/10.1177/001316447003000308>
- Lansford, J. E., Sharma, C., Malone, P. S., Woodlief, D., Dodge, K. A., Oburu, P., ... & Tirado, L. M. U. (2014). Corporal punishment, maternal warmth, and child adjustment: A longitudinal study in eight countries. *Journal of Clinical Child & Adolescent Psychology*, 43(4), 670-685. <https://doi.org/10.1080/15374416.2014.893518>
- Li, L., Qian, R., & Wang, Y. (2023). The Influence of Parenting Styles on Adolescents' Anxiety and Depression---the Mediating Role of Self-Efficacy. In *SHS Web of Conferences* (Vol. 180, p. 02002). EDP Sciences. <https://doi.org/10.1051/shsconf/202318002002>
- Maccoby, E., & Martin, J. A. (1983). Socialization in the context of family: Parent-child interaction. In E. M., Hetherington & P. H., Mussen, (Ed.), *Handbook of child psychology: Socialization, personality, and social development* (4. baskı), içinde (1-101).
- Malakar, P. (2018). Impact of Parenting Styles on Anxiety Sensitivity and Test Anxiety among Eighth Grade School Students. *IJHSR*, 8(9), 199-206.
- Manfredi, C., Caselli, G., Rovetto, F., Rebecchi, D., Ruggiero, G. M., Sassaroli, S., & Spada, M. M. (2011). Temperament and parental styles as predictors of ruminative brooding and worry. *Personality and Individual Differences*, 50(2), 186-191. <https://doi.org/10.1016/j.paid.2010.09.023>

- Manoochehri, M., & Mofidi, F. (2014). Relationship between child rearing styles and anxiety in parents of 4 to 12 years children. *Procedia-Social and Behavioral Sciences*, 116, 2578-2582. <https://doi.org/10.1016/j.sbspro.2014.01.614>
- Mohammadi, K., & Zandasta, E. (2018). Prediction of anxious thoughts and prospective student's ruminants based on parents' parenting styles. *Acad J Psychol Stud*, 7(2), 72-9.
- Mohammadkhani, M., Taymoori, P., & Roshani, D. (2014). The transtheoretical model: Changes in health beliefs among female adolescents in Iran during 3 years. *Chronic Diseases Journal*, 2(1), 21-31.
- Morejón, A. J. V., Vázquez-Morejón, R., & Muñoz-Fernández, N. (2020). Anxious Thoughts Inventory (AnTI). Psychometric characteristics of an adaptation to the Spanish clinical population. *Ansiedad y Estrés*, 26(2-3), 91-97. <https://doi.org/10.1016/j.anyes.2020.05.001>
- Panetta, S. M., Somers, C. L., Ceresnie, A. R., Hillman, S. B., & Partridge, R. T. (2014). Maternal and paternal parenting style patterns and adolescent emotional and behavioral outcomes. *Marriage & Family Review*, 50(4), 342-359. <https://doi.org/10.1080/01494929.2013.879557>
- Pinquart, M., & Kauser, R. (2018). Do the associations of parenting styles with behavior problems and academic achievement vary by culture? Results from a meta-analysis. *Cultural Diversity & Ethnic Minority Psychology*, 24(1), 75-100. <https://doi.org/10.1037/cdp0000149>
- Pinquart, M. (2017). Associations of parenting dimensions and styles with internalizing symptoms in children and adolescents: A meta-analysis. *Marriage & Family Review*, 53(7), 613-640. <https://doi.org/10.1080/01494929.2016.1247761>
- Rajabi Jourshari, R., Mohammadi Arya, A., Alavizadeh, S. M., Entezari, S., Hosseinkhazadeh, A. A., & Amirizadeh, S. M. (2022). Structural Relationships Between Assertiveness and Parenting Styles With Mediating Self-esteem and Anxiety of Singleton Children. *Iranian Rehabilitation Journal*, 20(4), 539-548. <https://doi.org/10.32598/irj.20.4.1584.1>
- Rezaei, R., Noori, N., Rezaei, A., Fotoohi, A., & Mohammadvali, A. (2018). The relationship between the manners of parenting by parents and the extent of anxiety among the students. *Chronic Diseases Journal*, 78-81.
- Shute, R., Maud, M., & McLachlan, A. (2019). The relationship of recalled adverse parenting styles with maladaptive schemas, trait anger, and symptoms of depression and anxiety. *Journal of Affective Disorders*, 259, 337-348. <https://doi.org/10.1016/j.jad.2019.08.048>
- Tabatabaeirad, E. S., & Balootbangan, A. A. (2017). Prediction of internet addiction and social anxiety based on parenting styles in adolescents of Sabzevar, Iran. *Journal of Education and Community Health*, 3(4), 52-58. <https://doi.org/10.21859/jech.3.4.52>
- Timpano, K. R., Carbonella, J. Y., Keough, M. E., Abramowitz, J., & Schmidt, N. B. (2015). Anxiety sensitivity: An examination of the relationship with authoritarian, authoritative, and permissive parental styles. *Journal of Cognitive Psychotherapy*, 29(2), 95-105. <https://doi.org/10.1891/0889-8391.29.2.95>
- Wang, Y., Shi, H., Wang, Y., Zhang, X., Wang, J., Sun, Y., ... & Cao, F. (2021). The association of different parenting styles among depressed parents and their offspring's depression and anxiety: a cross-sectional study. *BMC psychiatry*, 21(1), 1-10. <https://doi.org/10.1186/s12888-021-03512-8>
- Wells, A. (2006). The anxious thoughts inventory and related measures of metacognition and worry. *Worry and its psychological disorders: Theory, assessment and treatment*, 121-136. <https://doi.org/10.1002/9780470713143.ch8>
- Wells, A. (2000). *Emotional Disorders and Metacognition: Innovative Cognitive Therapy*. Chichester, UK: Wiley.
- Wells, A. (1994). A multi-dimensional measure of worry: Development and preliminary validation of the Anxious Thoughts Inventory. *Anxiety, Stress and Coping*, 6(4), 289-299. <https://doi.org/10.1080/10615809408248803>
- Wells, A., & Matthews, G. (1994). Self-consciousness and cognitive failures as predictors of coping in stressful episodes. *Cognition and Emotion*, 8, 279-295. <https://doi.org/10.1080/02699939408408942>
- Yaffe, Y. (2021). A narrative review of the relationship between parenting and anxiety disorders in children and adolescents. *International Journal of Adolescence and Youth*, 26(1), 449-459. <https://doi.org/10.1080/02673843.2021.1980067>

- Yaffe, Y. (2020). Systematic review of the differences between mothers and fathers in parenting styles and practices. *Current Psychology*, 1-14. <https://doi.org/10.1007/s12144-020-01014-6>
- Yaffe, Y. (2018). Establishing specific links between parenting styles and the s-anxieties in children: Separation, social, and school. *Journal of Family Issues*, 39(5), 1419-1437. <https://doi.org/10.1177/0192513X17710286>
- Yaghoubi Rad, F. (2014). An Investigation of the Relationship between Parenting Styles and Students' Anxiety. *Quarterly Journal of Family and Research*, 11(1), 111-128.
- Yazdani, S., & Daryei, G. (2016). Parenting styles and psychosocial adjustment of gifted and normal adolescents. *Pacific Science Review B: Humanities and Social Sciences*, 2(3), 100-105. <https://doi.org/10.1016/j.psrb.2016.09.019>
- Zeevi-Cousin, A., & Lavenda, O. (2023). The Mediating Role of Parenting Style in the Relationship between Parents' Openness to Different Ways of Thinking and Child Anxiety. *Children*, 10(9), 1564. <https://doi.org/10.3390/children10091564>

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).