

Impact of Perceived Parenting Styles on Social Anxiety among University Students: Mediating Role of Cognitive Styles

Abira Nadeem¹ & Afia Misri²

¹Post-Graduate Student, Department of Psychology, Air University, Pakistan

²PhD Scholar, Lecturer, Department of Psychology, Air University, Pakistan

ARTICLE INFO

Article History:

Received: January 26, 2025
Revised: February 08, 2025
Accepted: February 09, 2025
Available Online: March 11, 2025

Keywords:

Perceived Parenting Styles, Social Anxiety, Cognitive Style, Mediating Effect, University Students

Corresponding Author:

Abira Nadeem

Email:

amnanadeem9@gmail.com



ABSTRACT

Purpose: The present study aimed to investigate the impact of perceived parenting styles on social anxiety, and to find out the mediating role of cognitive styles on perceived parenting styles and social anxiety.

Methodology: Correlational (cross-sectional) research approach was selected to determine the effect of demographics on social anxiety in university students. Four private and four public universities in Islamabad were selected as locale from where the data was collected. The screened sample size was 536 which included 256 males and 280 females, and convenient sampling technique was used for the selection of the sample. The instruments used for the current study were General Health Questionnaire (Goldberg & Williams, 1988), The Perceived Parenting Style Scale (Divya & Manikandan, 2013), Social Phobia Inventory (SPIN, Connor et al., 2000) and Cognitive Style Indicator (Cools & Broeck, 2007).

Findings: The results of the analysis showed that authoritarian and permissive parenting styles had a significant positive relationship with social anxiety; whereas, authoritative parenting style had a significant negative relationship with social anxiety. However, social anxiety was found to be non-significantly associated with cognitive styles among university students. Moreover, perceived parenting styles were found to be the significant predictor of social anxiety. Whereas, cognitive styles (knowing, planning and creating) were found to be the non-significant mediators between perceived parenting styles and social anxiety.

Unique Contribution to Theory, Practice and Policy: This research has the potential to make a meaningful impact on the well-being and success of university students, which would be helpful in reducing the social anxiety among students.

Introduction

Parenting is defined as the process of upbringing children and keeping them safe so that they can turn into wellbeing adults. From infancy to adulthood, parenting encourages and supports a child's physical, emotional, social, spiritual, and cognitive growth (Trautner, 2017). Parents are very important in the upbringing of their children, as well as in the surroundings, rules, and boundaries they establish. Sometimes the child's minds suffer as a result of the strict regulations and limitations (Hurst et al., 2013).

Children's achievement comes from their parents. When the child's parents have faith in them, it is when they feel most secure. With such great self-esteem, they provide individuals the assurance to advance in society (Kagan, 2009; Zhang et al., 2014). Parents give their children advice on how to solve difficulties when they arise. According to psychological studies, parents who support their children's emotional expression have happier children (McKee et al., 2019). Young adults suffer less depression and anxiety when their parents encourage emotional expressiveness. Supporting emotional expression is a key component of good parenting (Havigerová et al., 2013). However, through literature it has been noticed that parents use both logical and instinctual control over their children's educational pursuits, introducing multiple strategies from their own homes (Steinberg, 2005). Positive parenting is an approach which involves being warm, compassionate, affectionate, and attentive towards the child (Kawaba et al., 2011). When individuals adopt these patterns, they open themselves susceptible to styles that are both internal to their own self and their surroundings (Havigerová et al., 2013).

The early years have drawn a lot of attention as a crucial period for child development and as a starting point for interventions aimed at enhancing the quality of life for children, both in terms of cognitive and social growth. Early investment yields significant rewards in the future (Trautner, 2017). While parenting can be challenging in the early years, many parents found it difficult to handle the challenges that arise throughout adolescence.

Furthermore, researches indicated that history of parents might have a significant impact on sensitivity levels of parents and child personality, both attachments of different quality and parental psychopathology, especially after unfavourable experiences (Morrison et al., 2013).

Parenting Styles

The parenting style is among the most crucial factors in adults' socialization (Villarejo, 2020). There are 3 major parenting styles: shielding child's health and wellbeing, making them prepare for adulthood, and transferring values of the culture (Bhatia, 2012; Kazdin, 2006). An unbreakable parent-child relationship is crucial for a kid's healthy development. Various styles of parenting - the ways in which parents connect with their children - are described by psychologists, where the major portion of categorization is on the emotional safety and power (Hurst et al., 2013).

Parenting styles consists of traits and behaviours towards children which are transferred to them and, collectively, create such an environment in which the attitudes of parents are reflected (Darling & Steinberg, 2005). The terms authoritarian, authoritative, and permissive parenting styles were introduced in order to differentiate typical (she used the word "normal") parenting styles (Baumrind, 1971). It was suggested that parents who exhibit authoritarianism try to mold, regulate, and evaluate the child's behaviour as per the strict rules. In contrast, permissive parents are kinder, less harsh, and give their kid more freedom. An authoritative parenting approach, lies in the middle of the two extremes.

Authoritarian Parenting Style

Numerous styles of parenting have been found: Authoritarian, Authoritative, Uninvolved and Permissive. Parents, who put greater hopes for the children, exhibit only a little involvement in their affairs is referred to as authoritarians. Authoritarian parents show no interest in their children, which causes the child to worry that if they don't live up to their expectations, they won't be good enough in the eyes of their parents and will be labeled a failure by the people. This fear could lead to social anxiety in the child (Trautner, 2017). Children may experience worry at not carrying out their tasks same like their mother and father desired. Children lessen their interaction and put more effort in winning in every situation (Hurst et al., 2013).

Authoritative Parenting Style

The second type is known as authoritative, and parents belonging to this group take an equal interest in their children's lives even if it means putting in more effort. The fact that someone believes in them gives the child a sense of security and pride. This provides them with a feeling of freedom. Rather than dismissing the kid's demands; parents respond to them equally, take interest in them, and occasionally correct them if they make a mistake (Pearson, 2013). In spite of their efforts to provide a sense of security to their parents and make them feel proud of them among people, children always want their parents to be proud of them. As a result of witnessing this, the child begins to worry about society's and parents' high expectations. However, these children are in some ways weaker since they can't take rejection (Duman & Margolin, 2007).

Uninvolved Parenting Style

Uninvolved parenting is another kind of parenting style, in which parents shows least importance in their children's lives. The children will become spoiled and rebellious as a result of this parenting style. Giving the child too many opportunities without establishing any boundaries will lead to the child believing that everything is possible (Bhatia, 2012; Bi et al., 2018). Additionally, society will play a part since the company of friends has a big effect on one's image among the people. When such people are caught by various terrible people outside, it will only increase the rage because the children previously lack the guidance from their parents, who can guide the difference between right and wrong. Parents should always keep an eye on their children's lives because they require the parents' assistance and affirmation of their belief in their kids (Guo, 2014).

Permissive Parenting Style

Permissive parenting style refers to a group of parents who place less demand on their children while being highly receptive to their needs. To keep their children motivated, they adopt friendly behavior (Guo, 2014). This group of parents gave their child the freedom to make decisions. These groups' children depend on their mother and father because the parents have provided their children with many facilities. When these kids do not succeed, they deceive their parents to grant them extra by convincing them that when they will give them more, they will do well than before (Pamela, 2013).

The fear of social circumstances and communication, that can certainly cause feelings of being inferior, judgment, and self-awareness, is called social anxiety (Jefferson, 2001). More precisely, social anxiety is the fear of being adversely assessed and judged from people that could result in depressive, humiliating, and inadequate feelings. If someone typically experiences anxiety in social settings but appears unaffected by it when unaccompanied, social anxiety could be the cause.

Psychologists initially believed just a small percentage of individuals suffer from social anxiety disorder or social phobia. However, the number has increased drastically in recent years. Numerous people across the world have reported to experience social anxiety symptoms in their life (Herbert et al., 2010). Even those who routinely and with experience speak in public can be affected by social anxiety. However, in the worst scenario, it may completely prevent the victim from speaking or even asking questions in public (Brandsma, 2010).

People who have social anxiety would be highly nervous by coming into any social situations which troubles them since they are frightened of embarrassment in front of people (Marshall, 2006). These individuals may analyze all possible embarrassing scenarios and outcomes in depth. These people would be exposed to heightened anxiety around others that can stop them from speaking or behaving like they wanted to (Liebowitz, 2012). An individual worries so much about appearing anxious that you become anxious yourself. Many of the physical symptoms of both types of social phobia are similar in those who experience those (Shear & Beidel, 2012). Their heart may race; they may get severe dry mouth, and may perspire a lot. Signs of this anxiety, such as blushing, stammering, shivering, and trembling, may be visible to others. These people may occasionally breathe too quickly, which can cause lack of sensation or pins and needles in their hands and feet (Kessler, 2014). These symptoms may intensify the anxiety. A panic attack may result from these physical signs and feelings of fear. This is a brief time period that typically lasts a few minutes (Connor et al., 2009).

Family background, past experiences and childhood traits are associated with the onset of social anxiety (Stein, 2005).

Cognitive styles (CS) are the enduring differences among individuals in how people observe, evaluate, and interpret their world. It explains how an individual thinks, observes, organizes, resolves issues, reach to a conclusion, and retain details or the favored method of utilizing that knowledge to resolve difficulties (Zhang & Sternberg, 2005). It is not related with intelligence, but it greatly affects how well someone learns.

Individual variations in the cognitive process are referred to as cognitive styles, including field independent style and field dependent style, reflective style and impulsive style, and analytic style (Keith, 2013). Individuals that are field dependent possess certain social abilities that field independent individuals do not exhibit as much. However, those who are independent in their profession are more skilled at organizing and cognitive analysis (Donald et al., 2009).

Mainly, cognitive learning styles are normally talked under two major categories i.e., reflectivity and impulsivity. Learners who are reflective go after accuracy and flow, whereas, impulsive learners desire to learn deeply rather than briefly (Shabani, 2017; Zhang et al., 2014). Cognitive styles had a vital impact on the selection of learning techniques, including affective approach of anxiety reduction and self-encouragement, the recalling strategies of grouping and imagery, the cognitive approaches of working, analyzing, and shortening, the compensation techniques of guessing, the metacognitive approaches of preparation, noticing, and self-evaluation (Shi, 2011).

Rationale

In recent years, it has been found that early years of a child has an outcome on one's later life; their early experiences shape their belief about themselves, other individuals and their surroundings (Egger & Angold, 2006). Hence, they find out regulations to shield their belief about themselves as it might make them fragile. In this way, they create dysfunctional behaviours that can ultimately cause psychological challenges such as social anxiety (Egger & Emdy, 2011). University students

often experience more social anxiety and psychological issues. This study will contribute to filling a gap on perceived parenting styles, university student's social anxiety and cognitive styles, particularly in Pakistan. Understanding how parenting styles influences social anxiety and the impact of cognitive styles as mediator can help develop more effective strategies such as guiding parents and educators in supporting university students.

On the basis of the available literature, it was also noted that the studies have been largely targeting the variables i.e. parenting styles, social anxiety and cognitive styles separately in children, adolescents, and young adults (Cheruvu & DP, 2023; Chong et al., 2020; Festa & Ginsburg, 2011; Soysa & Weiss, 2014; Zeevi & Lavenda, 2023). Separate researches have been conducted globally that determined the relationship among perceived parenting styles, social anxiety and cognitive styles; however, these variables have not been studied altogether in a single research with the mediating role of cognitive styles (Mughal et al., 2016; Riskind & Williams, 2006).

Through modern researches, it was also found that the role of cognitive styles has been investigated by many researches as an independent variable as well as an outcome variable (Dogan et al., 2015; Sahni, 2020; Sarah, 2010; Someya, 2001; Yadav et al., 2021). Few researches have also explored cognitive style as a moderating variable (Hoogeboom. Et al., 2008; Peckham & Lopez, 2009, Zeevi & Lavenda, 2023). Therefore, taking cognitive styles as a mediating variable in the present study will add depth to the research domain.

Moreover, numerous researches have been conducted on field dependent style, field independent style, rumination cognitive style and negative cognitive style (Agarwal, 2009; Behera, 2022; Onyekuru, 2015; Rood et al., 2012; Shi, 2011). However, very limited work has been done on cognitive styles consisting of dimensions of knowing, planning and creating (Bouckenoghe et al., 2016; Simuth & Schuller, 2014). Hence, these dimensions of cognitive styles were unique which called for significant attention and exploration.

Furthermore, there has been scarce amount of literature to find the existing variables in university students worldwide (Cherry, 2020), as well as in Pakistani context (Kayani et al., 2022); thus, the research theme was unique to the domain, and demands significant attention to provide valuable insights into the well-being of university students.

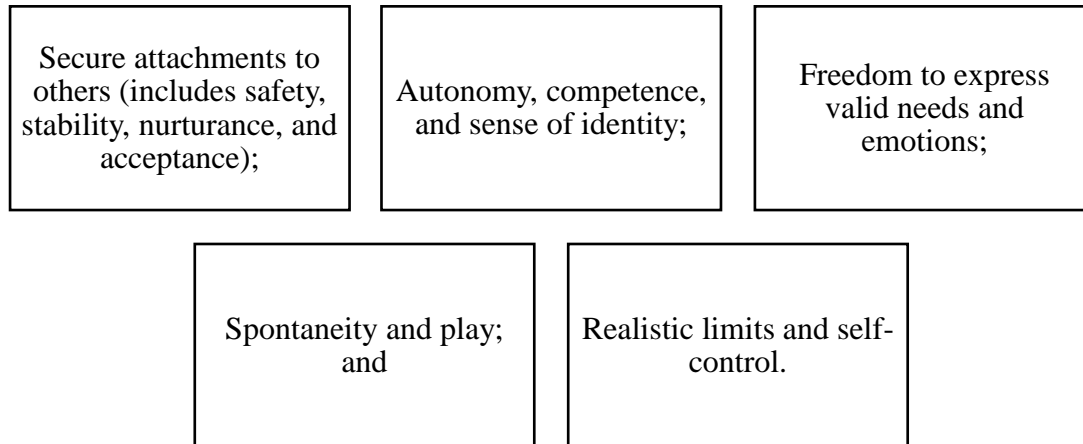
Additionally, with relevance to the already conducted researches, it was identified that demographic aspects of the university students was not explored. This research will play an important role to identify these demographic differences among university students which is a much-needed aspect that should be studied.

Findings from this research could influence policies and practices in educational sector such as molding the learning strategies for students and granting leaves to the students suffering from mental health conditions; thus, leading to a more supportive and mentally healthy learning environment. This research will also have the potential to make a meaningful impact on the well-being and success of university students and enhance our understanding of the complex factors contributing to social anxiety through publication of this research. Moreover, the research will offer scientific proof for making and encouraging healthy parenting styles, which shall reduce the social anxiety in students.

Theoretical Framework

Schema Theory

Young and his colleagues conducted an extensive research upon the overall personality development in the individual. Therefore, they presented the Schema theory. Schema theory was developed as a potential explanation for the relationship among early life experiences, innate temperament, and adult psychosocial or personological outcomes (Young et al., 2003). The theory is formed on the five basic emotional needs, which are as follows:



Young and his colleagues stated that the satisfaction or frustration of these demands can be caused by the interaction of early experiences (nurture) and inborn temperament (nature).

Secure attachments to others

Attachment is an emotional connection that influences behavior "from the cradle to the grave" (Bowlby, 1969). Strongly bonded young kids naturally show symptoms of uneasiness if their parents leave and glad if they return. Such children will look up to their mother and father or other adults for comfort when they're afraid. Kids who have secure attachment are open to parental contact, and they show good behaviour when either of their mother or father comes back. When any of the mother or father is not there, such children can to some extent be comforted by other people, but it is clear that they wish their mother and father with them. However, if parents are absent, neglect them, come and go from their lives, or are otherwise abusive to them, children may not form a secure attachment. Inconsistent parental behavior and emotions can also prevent the development of secure attachments.

Autonomy, competence, and sense of identity

Some children may lack autonomy because their parents do everything for them and won't let them learn on their own, or because their parents do nothing for them, which prevents them from learning healthy response management. Furthermore, identity is divided into two categories: personal and social. Children's perceptions of how they differ from others, as well as their sense of originality and uniqueness, are referred to as personal identities. Whereas, a child's sense of social identity, which is often formed through affiliation with family and/or friends, describes the ways in which they feel they are (or would like to be) similar to other people. Therefore, we learn about our similarities and differences, communication styles, likes and dislikes, and personal qualities

from the encounters we have with others. Our parents are the first individuals with whom we engage in these learning experiences.

Freedom to express valid needs and emotions

A kid's potential to manage and express his feelings is crucial to their development. Young children must learn to send and receive emotional messages in ways that are beneficial to both themselves and others if they are to successfully engage in interpersonal interactions and establish the relationships required for pleasant social experiences. Children who are capable to manage their emotions are better skilled to participate in tasks and social interactions with others without fear of rejection or unfavorable reactions. If this need is not addressed, a child may experience negative consequences while expressing his emotions, such as being punished for being sad or being told not to display anxiety or worry around others.

Spontaneity and play

Moreover, children begin to relate and take part in their surroundings from a small age. Through play, kids can use their imagination and discover a place they can manage, defeating their doubts and uncertainties and behaving like grownups, particularly through the involvement with their fellow peers or adult caregivers. Kids get to find out new abilities via play as they discover their surroundings, that aids them increase the confidence and resilience they shall require to face challenges in the upcoming years.

Realistic limits and self-control

As a youngster, having limits and boundaries established is thought to aid growth in various manners, including:

1. With a ultimate goal of having a child internalize this and be able to manage their responsibilities when they get older, it aids in teaching self-discipline.
2. It protects a child from harm.
3. It aids in reducing a natural urge to take an impulsive action and seek out instant fulfillment.
4. It helps children in learning how to control challenging emotions like sadness or rage that come with having boundaries set.
5. Limits assist children establish a sense of safety because they demonstrate to the child that their parents care about them, even if this is not something they are aware of.

Due to negligence on the side of their parents, some children may not experience any limits throughout the development of their schemas and may be able to do whatever they want. Others may have parents who are extremely strict and who make them fearful of making mistakes. A person who has no boundaries and is given free hand from an early age may experience emotional distress when confronted with settings (like school) where boundaries are enforced.

The schema theory presents a comprehensive framework to understand the role of different components like early years experiences, innate temperament, and adult psychosocial or personological outcomes upon student's strong connection with other individuals, their freedom, aptitude, and individuality; independence to convey suitable desires and feelings; impulsiveness and play; and practical limitations and self-control and also develop an insight into cognitive style and social anxiety. This theory will help to better explain how the cognitive styles (knowing, planning and creating) will mediate the impact of perceived parenting styles (authoritative, authoritarian and permissive) upon social anxiety in my study. In short, schema theory will serve as a guiding map into the university students' cognitive styles which will aid in identifying the

effect of perceived parenting styles on their social anxiety. Additionally, this theory shall enable them to explain the unknowing circumstances and analyze these circumstances through their experience, and encourage the acquiring of new information and talents.

Conceptual Framework

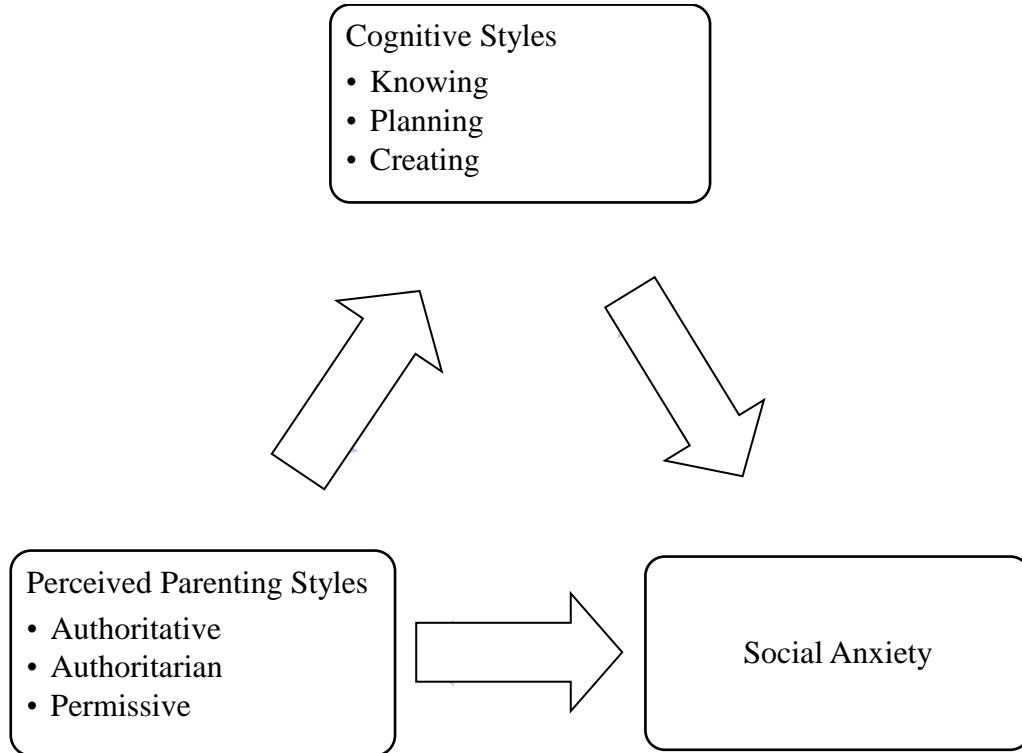


Figure 1: Conceptual Framework

Method

Research Design

The present research was used the quantitative approach which is the procedure of gathering and studying the data in numbers (Bhandari, 2020; Cengage, 2010; Fleetwood, 2023; LoBiondo et al., 2010; Mertens, 2010). The study utilized the correlational (cross-sectional) research design to find out the effect of perceived parenting styles on social anxiety.

Locale

Locale of the present study was different public and private universities of Islamabad city. These universities included: Air University, PIEAS, Muslim Youth University, International Islamic University, Quaid e Azam University, COMSATS and Riphah University.

Sample

The study sample of the current research was public and private university students from different departments. These universities included: Air University, PIEAS, Muslim Youth University, International Islamic University, Quaid e Azam University, COMSATS and Riphah University. Size of the sample was calculated through Tabachnick and Fidell formula. The screened sample size was 536 which included 256 males and 280 females. Further, the current research sample included students from various ages and education level. Convenient sampling method was used to gather the data.

Inclusion Criteria

The inclusion criteria of the research were:

- Students between 18-26 years of age
- Students enrolled in BS and MS degree programs
- Students whose parents lived together and,
- Students lived with their parents as well.

Exclusion Criteria

The exclusion criteria of the study were:

- Students whose fathers lived abroad
- Students whose mother/father/both had done second marriage
- Students who had any kind of physical disability

Data Collection Instruments

General Health Questionnaire (Goldberg & Williams, 1988)

General Health Questionnaire was developed by (Goldberg & Williams, 1988). This questionnaire was used in the following research as a screening tool to rule out any mental health conditions among university students. It contains 12 items that are divided into 3 subscales: Social Dysfunction (items 1, 3, 4, 7, 8, & 12), Anxiety and Depression (items 2, 5, 6, & 9) and Loss of Confidence (items 10 & 11). The respondents made use of the given four-point Likert scale ranging from 0 to 3 (0 = Not at all, 1 = No more than usual, 2 = Rather more than usual, 3 = Much more than usual). Moreover, 6 items of the screening tool are positively worded (items 1, 3, 4, 7, 8 & 12) and 6 items are negatively worded (items 2, 5, 6, 9, 10, & 11). Positively worded items are reverse scored. The screening tool's score ranges from 0-36, with greater score demonstrating worse mental health. All the three subscales are scored separately. A cutoff value of 12 was found to distinguish between adults with and without mental health condition. Additionally, the screening tool's internal consistency (Cronbach's alpha) is .84 with an adult population.

The Perceived Parenting Style Scale (Divya & Manikandan, 2013)

The Perceived Parenting Style Scale was developed by (Divya & Manikandan, 2013). This scale was used in the following research as a scale to measure perceived parenting style of the subject. It consists of 30 items in total that are divided into 3 subscales: Authoritative (items 1, 4, 7, 10, 13, 16, 19, 22, 25, & 28), Authoritarian (items 2, 5, 8, 11, 14, 17, 20, 23, 26, & 29) and Permissive (items 3, 6, 9, 12, 15, 18, 21, 24, 27, & 30). The respondents made use of the given five-point Likert scale ranging from 1 to 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). All the three perceived parenting styles are scored separately. Moreover, the authoritative style has an alpha coefficient of .79, authoritarian .81 and permissive .86.

The Social Phobia Inventory (SPIN, Connor et al., 2000)

The Social Phobia Inventory (SPIN) was developed by (Connor et al., 2000). It is a brief 17-item screening tool designed to assess fear, avoidance, and physiological symptoms of anxiety associated with social anxiety. Responses are based on a 5-point Likert-type scale ranging from 0 to 4 (0 = Not at All, 1 = A little bit, 2 = Somewhat, 3 = Very much and 4 = Extremely). Scores for the SPIN can range from 0 to 68, with higher scores reflecting greater social phobia

symptomatology. Three subscales evaluate Fear (e.g., fear of being embarrassed), Avoidance (e.g., avoidance of going to parties), and Physiological (e.g., blushing) symptoms associated with social phobia. A cutoff value of 19 was found to distinguish between adults with and without social anxiety disorder. The scale's internal consistency (Cronbach's alpha) is .89 with an adult population.

Cognitive Style Indicator (Cools & Broeck, 2007)

The Cognitive Style Indicator was developed by (Cools & Broeck, 2007). This scale was used in the following research as a measure to assess information processing. It has 18 items in total that are divided into 3 subscales: Knowing (items 2, 8, 13 & 15), Planning (items 3, 6, 9, 10, 12, 16 & 18) and Creating (items 1, 4, 5, 7, 11, 14 & 17). Each subscale will be scored separately. The respondents will make use of the given five-point Likert-scale ranging from 1 to 5 (1 = Typifies me totally not, 2 = Typifies me rather not, 3 = Neutral, 4 = Typifies me rather well, 5 = typifies me totally). Moreover, the knowing style has an alpha coefficient of .76, planning .85 and creating .79.

Procedure

Firstly, the universities of Islamabad were selected for data collection based upon the convenience of the researcher. A permission letter was issued by the Air University administration, which was given to the administrations of the selected universities. University students were approached through various academic departments and their informed consent was taken. The students, who gave the permission to take part in the research, were given the scales. These scales were filled through face-to-face contact at the academic departments, library and cafeterias. For queries, students were encouraged to contact the study researcher on the provided email address. Participants were then screened on the basis of the General Health Questionnaire and the inclusion and exclusion criteria of the research.

The procedure mainly consisted of two phases. Phase 1 was the screening phase where the participants were screened on the basis of General Health Questionnaire and the inclusion and exclusion criteria. Phase 2 was the data collection phase. Initially, the data was collected more from females than males. However, to have approximately the same number of participants from both the groups, more data was collected from males.

Results

Table 1: Sociodemographic Characteristics of Participants at Baseline

Baseline	n	M	SD	%
Demographics				
Gender				
Male	256			47.8
Female	280			52.2
Age		22.72	2.17	
18	15			2.8
19	33			6.2
20	50			9.3
21	59			11
22	61			11.4
23	113			21.1

24	85	15.9
25	69	12.9
26	43	8
27	5	.9
28	3	.6
Religion		
Islam	534	99.6
Marital Status		
Single	479	89.4
Married	57	10.6
Family System		
Nuclear	365	68.1
Joint	171	31.9
Birth Order		
Only child	19	3.5
First born	153	28.5
Middle child	257	47.9
Last born	107	20
Degree Program		
BS	238	44.4
MS	193	36
Other	105	19.6
Department		
Engineering	75	14
Non-Engineering	227	42.4
Humanities	117	21.8
Medical	117	21.9
Educational Institute		
Public	271	50.6
Private	265	49.4
Job Status		
Employed	142	26.5
Unemployed	394	73.5

Note. $N = 536$

The impact of Perceived Parenting Styles on Social Anxiety among University Students: Mediating Role of Cognitive Styles had four scales (General Health Questionnaire, Perceived Parenting Style Scale, Social Phobia Inventory and Cognitive Style Indicator). The screening tool General Health Questionnaire had three subscales: Social Dysfunction, Anxiety and Depression and lastly, Loss of Confidence. The Perceived parenting Styles had three subscales: Authoritative, Authoritarian and Permissive; whereas, Cognitive Styles had three subscales as well: Knowing, Planning and Creating.

Table 2: Psychometric Properties for General Health Questionnaire, Perceived Parenting Styles, Social Anxiety and Cognitive Styles with their subscales

Scale	k	M	SD	Range		Cronbach's α
				Actual	Potential	
General Health Questionnaire	12	6.35	2.27	1-12	0-36	.73
Social Dysfunction	6	2.97	1.68	0-7	0-18	.81
Anxiety and Depression	4	2.29	1.31	0-6	0-12	.89
Loss of Confidence	2	1.09	.82	0-4	0-6	.71
Perceived Parenting Styles						
Authoritative	10	36.26	7.77	13-50	10-50	.86
Authoritarian	10	24.16	7.15	13-47	10-50	.79
Permissive	10	24.89	6.87	10-47	10-50	.73
Social Anxiety	17	27.99	14.49	0-63	0-68	.92
Cognitive Styles						
Knowing	4	13.97	3.57	5-20	4-20	.79
Planning	7	25.38	5.28	9-35	7-35	.83
Creating	7	23.89	4.87	10-34	7-35	.75

Note: k = No. of Items, M = Mean, SD = Standard Deviation, Cronbach's α = Reliability of the scales

All the four scales and their subscales were found to be reliable after running the reliability test. The reliability for General Health Questionnaire was found to be $\alpha = .73$, for Perceived Parenting Styles (Authoritative $\alpha = .86$, Authoritarian $\alpha = .79$ and Permissive $\alpha = .73$), for Social Anxiety $\alpha = .92$, and for Cognitive Styles (Knowing $\alpha = .79$, Planning $\alpha = .83$ and Creating $\alpha = .75$).

Table 3: Correlation Matrix of Scales of Perceived Parenting Styles, Social Anxiety and Cognitive Styles (N=536)

Variables	1	2	3	4	5	6	7
1 Authoritative	-						
2 Authoritarian	-.39**	-					
3 Permissive	-.22**	.54**	-				
4 Social Anxiety	-.11*	.35**	.20**	-			
5 Knowing	.33**	.15**	.22**	-.04	-		
6 Planning	.42**	.09*	.09*	-.04	.80**	-	
7 Creating	.31**	.13**	.19**	.01	.80**	.74**	-

Note: **p<0.01 (two-tailed).

The results of Pearson product moment correlation showed the subscales of perceived parenting style i.e. authoritarian and permissive were significantly positively associated with social anxiety and cognitive styles. However, the authoritative parenting style was found to be significantly negatively associated with social anxiety. Additionally, social anxiety was found to be non-significantly associated with cognitive styles subscales among university students.

Table 4: Standardized Estimates of Direct Effects through Cognitive Styles between Perceived Parenting Styles and Social Anxiety in University Students (N=536)

Variables	Knowing		Planning		Creating		Social Anxiety	
	β	S.E	β	S.E	β	S.E	B	S.E
Authoritative	.326***	.019	.419***	.027	.299***	.026	-.121*	.088
Authoritarian	.139***	.021	.083	.032	.127*	.029	.372***	.082
Permissive	.182***	.023	.071	.035	.174***	.032	.271***	.096
Knowing	-		-		-		-.006	.028
Planning	-		-		-		-.009	.031
Creating	-		-		-		.020	.024
R^2_{AE}	.137		.185		.110		.047	
R^2_{AN}	.051		.019		.038		.167	
R^2_{PE}	.062		.016		.049		.096	
F_{AE}	16.802***		24.001***		13.089***		3.223*	
F_{AN}	5.743***		2.044		4.217*		13.219***	
F_{PE}	6.948***		1.773		5.436***		6.972***	

Note: * $p < .05$, *** $p < .001$, R^2 = R-squared, F= F Ratio

The results presented that perceived parenting styles i.e. authoritative, authoritarian and permissive were found to be significantly positively related with knowing and creating cognitive styles. Authoritative parenting style was also found to be significantly positively related with planning cognitive style. However, authoritarian and permissive parenting styles were found to be non-significantly related with planning cognitive style. Further, authoritarian and permissive parenting styles were found to be positively related with social anxiety; whereas, authoritative was found to be significantly negatively related with social anxiety. In addition, knowing, planning and creating cognitive styles were found to be non-significantly related with social anxiety among university students.

Table 8: Comparison of Birth Order on Social Anxiety (N=536)

Variable	Only Child		First Born		Middle Child		Last Born		F (3,532)	p	η^2
	M	SD	M	SD	M	SD	M	SD			
Social Anxiety	37.7	18.7	26.9	15.1	29.7	14.7	23.7	10.3	7.6	.000	.04

Note. ** $p < .01$ (two-tailed), η^2 = Eta Squared, F= F Ratio, M=Mean, SD=Standard Deviation

The assumption of homogeneity of variance was found to be assumed (as $F=11.19$, $p > .05$). The results of One-Way Independent Measures ANOVA showed that there were significant differences of social anxiety across different birth orders, with medium effect size. For further pair wise comparisons, post-hoc (Hochberg's) was carried out.

The results of pair-wise comparison showed that the pair of only child and first born was significantly different in terms of social anxiety, which indicated that social anxiety was greater in only child as compared to the first born. Furthermore, the pair of only child and middle born was also significantly different in terms of social anxiety, which depicted that social anxiety was greater in only child as compared to the middle born. Additionally, the pair of only child and last born was also significantly different in terms of social anxiety, which showed that social anxiety

was greater in only child as compared to the last born. Moreover, the pair of middle child and last born was also significantly different in terms of social anxiety, which showed that social anxiety was greater in middle born as compared to the last born.

However, the pair of first born and middle child was non-significantly different in terms of social anxiety, which showed that both the birth orders had equal social anxiety. In addition to this, the pair of first born and last born was also non-significantly different in terms of social anxiety, which showed that both the birth orders had equal social anxiety.

Conclusively, only child had the greater social anxiety as compared to first born, middle born, and last born.

Table 9: Comparison of Degree Programs on Social Anxiety (N=536)

Variable	BS (n=238)		MS (n=193)		Other (n=105)		F(2,533)	p	Eta Square
	M	SD	M	SD	M	SD			
Social Anxiety	28.51	13.56	29.53	13.44	23.95	17.52	5.41	.005	.02

Note. p=.05, F= F Ratio, M=Mean, SD=Standard Deviation

The assumption of homogeneity of variance was not found to be assumed (as F=5.41, p=.05). However, the results of One-Way Independent Measures ANOVA showed that there were no significant differences of social anxiety across different degree programs, with small effect size.

Table 10: Comparison of Gender on Social Anxiety (N=536)

Variable	Males		Females		t(534)	p	Cohen's d
	M	SD	M	SD			
Social Anxiety	28.60	15.54	27.43	13.47	.93	.001	.08

Note. *p<.05 (one-tailed), M=Mean, SD=Standard Deviation

The assumption of homogeneity of variance was found to be assumed (F=10.7, p>.05). The results of Independent Samples t-test showed that statistically significant gender differences were found in terms of social anxiety, which depicted that males had higher level of social anxiety as compared to females, with small effect size.

Table 11: Comparison of Job Status on Social Anxiety (N=536)

Variable	Employed		Unemployed		t(534)	p	Cohen's d
	M	SD	M	SD			
Social Anxiety	28.43	18.25	27.83	12.91	.42	.000	.04

Note. * p<.05 (one-tailed), M=Mean, SD=Standard Deviation

The assumption of homogeneity of variance was found to be assumed (F=43.57, p>.05). The results of Independent Samples t-test showed that statistically significant job status differences were found in terms of social anxiety, which depicted that employed people had higher level of social anxiety as compared to unemployed people, with small effect size.

Table 12: Comparison of Marital Status on Social Anxiety (N=536)

Variable	Single		Married		<i>t</i> (534)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Social Anxiety	28.69	14.73	22.05	10.76	3.29	.001	.51

Note. **p*<.05 (one-tailed), *M*=Mean, *SD*=Standard Deviation

The assumption of homogeneity of variance was found to be assumed (*F*=10.31, *p*>.05). The results of Independent Samples *t*-test showed that statistically significant marital status differences were found in terms of social anxiety, which depicted that single people had higher level of social anxiety as compared to married people, with medium effect size.

Table 13: Comparison of Educational Institutes on Social Anxiety (N=536)

Variable	Public		Private		<i>t</i> (534)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Social Anxiety	28.59	14.87	27.37	14.11	.97	.33	.08

Note. *p*>.05 (one-tailed), *M*=Mean, *SD*=Standard Deviation

The assumption of homogeneity of variance was found to be assumed (*F*=.72, *p*>.05). The results of Independent Samples *t*-test showed that non-significant educational institute differences were found in terms of social anxiety, with small effect size.

Table 14: Comparison of Family Systems on Social Anxiety (N=536)

Variable	Nuclear		Joint		<i>t</i> (534)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Social Anxiety	27.82	14.39	28.21	14.92	3.29	.78	.03

Note. *p*>.05 (one-tailed), *M*=Mean, *SD*=Standard Deviation

The assumption of homogeneity of variance was found to be assumed (*F*=1.08, *p*>.05). The results of Independent Samples *t*-test showed that non-significant family system differences were found in terms of social anxiety, with small effect size.

Discussion

The research intended at exploring the impact of perceived parenting styles on social anxiety among university students, by taking their cognitive styles as a mediator which explained the relationship between perceived parenting style and social anxiety. A powerful parent-child relation is vital for a kid's healthy development. Various styles of parenting- the ways in which parents bond with their children - are described by researches, with the common categorizations diverse on the emotional care and power (Bhatia, 2012; Hurst et al., 2013; Kazdin, 2006).). However, social anxiety becomes a significant concern among adults in relation to their perceived parenting experiences. It doesn't just impact one's potential to communicate on a daily basis but as well affects their mental health (Morrison & Heimerg, 2013). Therefore, the current research endeavors to fulfill the gap by explaining the mediating role of cognitive style in the association of perceived parenting style and social anxiety in university students.

Conclusion

In conclusion, aim of the present research was to determine the impact of perceived parenting style on social anxiety among university students, assessing the demographic differences on social anxiety in university students and examining the mediating effect of cognitive style between perceived parenting style and social anxiety.

The analysis results depicted that perceived parenting style was significantly positively associated with social anxiety and cognitive style among university students. However, social anxiety was found to be non-significantly associated with cognitive style among university students. Second, statistically significant gender differences were found in terms of social anxiety, which depicted that men had more social anxiety as compared to women, with small effect size. Third, statistically significant job status differences were found in terms of social anxiety, which depicted that employed people, had higher level of social anxiety as compared to unemployed people, with small effect size. Fourth, statistically significant marital status differences were found in terms of social anxiety, which depicted that single people had higher level of social anxiety as compared to married people, with medium effect size.

However, non-significant educational institute differences were found in terms of social anxiety. Moreover, there were significant differences of social anxiety across different birth orders, with medium effect size which depicted that only child had the greater social anxiety as compared to first born, middle born, and last born. Also, there were no significant differences of social anxiety across different family system.

Lastly, perceived parenting style was found to be the non-significant predictor of cognitive style and social anxiety. Moreover, cognitive style was also found to be non-significant predictor of social anxiety. However, cognitive style was found to be significant mediator between perceived parenting style and social anxiety, which showed that a decrease in cognitive style tend to decrease perceived parenting style, which in turn decreases social anxiety among university students.

However, it's necessary to consider that this research is not without its limits. The sample consisted mainly of individuals from a single geographic region being Islamabad which therefore, limits the generalizability of our findings. Future researches should aim to expand the search on a broader level with more diverse populations.

All things considered, the current study plays an essential part in the contribution to the increasing body of research putting emphasis on the significance of perceived parenting style on social anxiety. It is expected that this study has provided a better understanding of the relationship between perceived parenting styles on social anxiety among university students within the Pakistani context.

Recommendations

Future researches are suggested to have a large sample size so that the results could be generalized on a wider scale of people. Secondly, interviews from the university students should also be done in the future to match their responses to ensure the accuracy of the responses. Thirdly, the scales can be translated into Urdu language so that it is easier for everyone to understand process and fill in the questionnaire items being asked. Moreover, present research was limited investigate the perceived parenting styles of the parents (mother and father) altogether. An extensive study should be considered to find out the perceived parenting styles of the mother and father to fill in this literature gap. Lastly, comparison with respect to age of the university students can also be done in the future researches.

References

1. Adams, G. C., Balbuena, L., Meng, X., & Asmundson, G. J. (2016). When social anxiety and depression go together: A population study of comorbidity and associated consequences. *Journal of Affective Disorders*, 206, 48–54. <https://doi.org/10.1016/j.jad.2016.07.031>
2. Alegre, A. (2011). Parenting styles and children's emotional intelligence: What do we know? *The Family Journal*, 19(1), 56–62.
3. Arrindell, W. A., Emmelkamp, P. M., Monsma, A., & Brilman, E. (1983). The role of perceived parental rearing practices in the aetiology of phobic disorders: A controlled study. *The British Journal of Psychiatry*, 143(2), 183-187. <https://doi.org/10.1192/bjp.143.2.183>
4. Arsalan. (2018). Parenting Style Research Paper. Retrieved from Academic Master: <https://academic-master.com/parenting-style>
5. Baker, S. L., Heinrichs, N., Kim, H. J., & Hofmann, S. G. (2002). The Liebowitz social anxiety scale as a self-report instrument: a preliminary psychometric analysis. *Behaviour research and therapy*, 40(6), 701-715. [https://doi.org/10.1016/S0005-7967\(01\)00060-2](https://doi.org/10.1016/S0005-7967(01)00060-2)
6. Ballash, N. G. (2006). Family functioning, perceived control, and anxiety: A mediational model. *Journal of Anxiety Disorders*, 20(4), 486-497. <https://doi.org/10.1016/j.janxdis.2005.05.002>
7. Barnhart, C. M., Raval, V. V., Jansari, A., & Raval, P. H. (2013). Perceptions of parenting style among college students in India and the United States. *Journal of Child and Family Studies*, 22(5), 684–693.
8. Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11, 56-95.
9. Betts, L. R., Trueman, M., Chiverton, L., Stanbridge, A., & Stephens, J. (2013). Parental rearing style as a predictor of attachment and psychosocial adjustment during young adulthood. *Journal of Social and Personal Relationships*, 30(6), 675–693.
10. Breiner, H., Ford, M., & Gadsden, V. L. (2016). Parenting knowledge, attitudes, and practices. *Parenting Matters: Supporting Parents of Children Ages 0-8*.
11. Briggs-Gowan, J. M., Carter, A. S., Skuban, E. M., & Horwitz, S. M. (2001). Prevalence of social-emotional and behavioral problems in a community sample of 1-and 2-year-old children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(7), 811-819. <https://doi.org/10.1097/00004583-200107000-00016>
12. Cederlund, R. (2013). Social anxiety disorder in children and adolescents: assessment, maintaining factors, and treatment. (Doctoral dissertation, Department of Psychology, Stockholm University).
13. Chan, T. & Koo, A. (2011). Parenting style and youth outcomes in the UK. *European Sociological Review*, 27(3), 385–399.
14. Cherry, K. (2020). Why Parenting Styles Matter When Raising Children. Retrieved from verywellmind: <https://www.verywellmind.com/parenting-styles-2795072>
15. Clark, D. M., & McManus, F. (2002). Information processing in social phobia. *Biological psychiatry*, 51(1), 92-100. [https://doi.org/10.1016/S0006-3223\(01\)01296-3](https://doi.org/10.1016/S0006-3223(01)01296-3)
16. Cools, E., & Van Den Broeck, H. (2007). Development and validation of the cognitive style indicator. *The Journal of Psychology: Interdisciplinary and Applied*, 141(4), 359–387. <https://doi.org/10.3200/JRLP.141.4.359-388>
17. Cribb, G., Moulds, M. L., & Carter, S. (2006). Rumination and experiential avoidance in depression. *Behavior Change*, 23(3), 165–176.

19. Dearnorff, J., Hayward, C., Wilson, K. A., Bryson, S., Hammer, L. D., & Agras, S. (2007). Puberty and gender interact to predict social anxiety symptoms in early adolescence. *Journal of Adolescent Health, 41*(1), 102-104. <https://doi.org/10.1016/j.jadohealth.2007.02.013>
20. DeWitt, D. J., Chandler-Coutts, M., Offord, D. R., Gillian, K., McDougall, J., Specht, J., & Stewart, S. (2005). Gender differences in the effects of family adversity on the risk of onset of DSM-III-R social phobia. *Journal of Anxiety Disorders, 19*(5), 479-502. <https://doi.org/10.1016/j.janxdis.2004.04.010>
21. Drozd, E., & Pokorski, M. (2007). Parental attitudes and social competence in adolescents. *Journal of Physiology and Pharmacology, 58*(5), 175–184.
22. Edition, F. (2013). *Diagnostic and statistical manual of mental disorders*. Am Psychiatric Assoc, 21.
23. Fisak, B. J., & Mann, A. (2010). The relation between parent rearing practices and adolescent social anxiety: A factor analytic approach. *International Journal of Adolescence and Youth, 15*(4), 303-317.
24. Fischer, T. D., Smout, M. F., & Delfabbro, P. H. (2016). The relationship between psychological flexibility, early maladaptive schemas, perceived parenting and psychopathology. *Journal of Contextual Behavioral Science, 5*(3), 169–177.
25. Flujas-Contreras, J. M., & Gómez, I. (2018). Improving flexible parenting with acceptance and commitment therapy: A case study. *Journal of Contextual Behavioral Science, 8*, 29–35.
26. Greco, L. A., & Hayes, S. C. (Eds.). (2008). *Acceptance & mindfulness treatments for children & adolescents: A practitioner's guide*. New Harbinger Publications.
27. Heaven, P., & Ciarrochi, J. (2008). Parental styles, gender and the development of hope and self-esteem. *European Journal of Personality, 22*(8), 707–724.
28. Higuera, V. (2018). *Social Anxiety Disorder*. Retrieved from Healthline: <https://www.healthline.com/health/anxiety/social-phobia>
29. Infurna, M. R., Brunner, R., Holz, B., Parzer, P., Giannone, F., Reichl, C., & Kaess, M. (2016). The specific role of childhood abuse, parental bonding, and family functioning in female adolescents with borderline personality disorder. *Journal of personality disorders, 30*(2), 177-192.
30. Kawabata, Y., Alink, L. R., Tseng, W.-L., Ijzendoorn, M. H., & Crick, N. R. (2011, December). Maternal and paternal parenting styles associated with relational aggression in children and adolescents: A conceptual analysis and meta-analytic review. *Developmental Review, 31*(4), 240-278. <https://doi.org/10.1016/j.dr.2011.08.001>
31. Kimberly, A. A., Meghan, E. Q., William, M. V., & Jutta, J. (2018). Comparing cognitive styles in social anxiety and major depressive disorders: An examination of rumination, worry, and reappraisal. *British Journal of Clinical Psychology, 58*(2). <https://doi.org/10.1111/bjc.12210>
32. Kocovski, N. L., Endler, N. S., Rector, N. A., & Flett, G. L. (2005). Ruminative coping and post-event processing in social anxiety. *Behavior Research and Therapy, 43*, 971–984. <https://doi.org/10.1016/j.brat.2004.06.015>
33. La Greca, A. M., & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of abnormal child psychology, 26*(2), 83-94. <https://doi.org/10.1023/A:1022684520514>
34. Laible, D. J., & Carlo, G. (2004). The differential relations of maternal and paternal support and control to adolescent social competence, self-worth, and sympathy. *Journal of Adolescent Research, 19*(6), 759–782.

35. Langenhof, M. R., Komdeur, J., & Oldehinkel, A. J. (2016). Effects of parenting quality on adolescents' personality resemblance to their parents. The TRAILS study. *Journal of adolescence*, 51, 163-175.
36. McElhaney, K. B., & Allen, J. P. (2001). Autonomy and adolescent social functioning: The moderating effect of risk. *Child Development*, 72(1), 220–231.
37. Morrison, A. S., & Heimberg, R. G. (2013). Social Anxiety and Social Anxiety Disorder. *Annual Review of Clinical Psychology*, 9, 249-274. <https://doi.org/10.1146/annurev-clinpsy-050212-185631>
38. National Collaborating Centre for Mental Health. (2013). Retrieved from Social anxiety disorder: recognition, assessment and treatment. British Psychological Society: <https://pubmed.ncbi.nlm.nih.gov/25577940/>
39. Neal, J. A., & Edelmann, R. J. (2003). The etiology of social phobia: Toward a developmental profile. *Clinical Psychology Review*, 23(6), 761-786. [https://doi.org/10.1016/S0272-7358\(03\)00076-X](https://doi.org/10.1016/S0272-7358(03)00076-X)
40. Pamela, L. (2022). What Is Authoritative Parenting? Retrieved from Parenting for brain: <https://www.parentingforbrain.com/authoritative-parenting/>
41. Pearson, A. L. (2013). The Impact of Parenting Styles on the Emotional Regulation of Adolescents. Retrieved from Sophia, the St. Catherine University repository: https://sophia.stkate.edu/msw_papers/248/
42. Rapheal, J., & Varghese, P. (2017, June). RELATION BETWEEN PARENTING STYLE AND SOCIAL ANXIETY AMONG ADOLESCENTS BELONGING TO LOW SOCIOECONOMIC CLASS. *Periyar University Journal*, 4, 40-55.
43. Rork, K. E., & Morris, T. L. (2009). Influence of parenting factors on childhood social anxiety: Direct observation of parental warmth and control. *Child & Family Behavior Therapy*, 31(3), 220-35.
44. Sahithya, B. R., Manohari, S. M., & Vijaya, R. (2019). Parenting styles and its impact on children—a cross cultural review with a focus on India. *Mental Health, Religion & Culture*, 22(4), 357–383.
45. Verhoeven, M., Bögels, S. M., & van der Bruggen, C. C. (2012). Unique roles of mothering and fathering in child anxiety; moderation by child's age and gender. *Journal of child and family studies*, 21(2), 331-43. <https://doi.org/10.1007/s10826-011-9483-y>
46. Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, 23(3), 34-41.
47. Yousaf, S. (2015). The Relation between Self-Esteem, Parenting Style and Social Anxiety in Girls. *Journal of education and Practice*, 6(1), 140-142.