

The Impact of Interpersonal Relationships on Learning Anxiety in Junior High School Students

Junnan Li^{1,*,†}, Siting Yu^{2,†}

¹Beijing Royal School, Beijing, China

²Department of Primary Education, Tianhua College, Shanghai Normal University, Shanghai, China

*Corresponding author: lijunnan@brs.edu.cn

†These authors contributed equally.

Abstract. Junior high school students are at a critical stage of adolescent development. These children are emotionally sensitive and prone to mental health problems. A survey of the mental health status of junior high school pupils found that the detection rate of learning anxiety was highest in junior high school pupils and increased with grade level. Therefore, it is necessary to investigate the causes and influencing factors of learning anxiety in depth. This study analyzes and compares the existing literature on the effects of interpersonal relationships on learning anxiety in junior high school students. Results show that normal parent-child relationships, supportive teacher-student relationships, and peer support were all negatively associated with learning anxiety. In contrast, unhealthy interpersonal relationships will increase students learning anxiety level. This paper explores how parent-child, teacher-student, and peer relationships influence learning anxiety among junior high school students, reviewing and collating data to derive both a dominant-subordinate and an integrative perspective. Overall, interpersonal relationships affect learning anxiety in junior high students in different ways and to various degrees, and interpersonal relationships affect the generation and mitigation of learning anxiety in junior high students to some extent.

Keywords: learning anxiety, junior high school students, interpersonal relationship.

1. Introduction

Anxiety is a topic that has been frequently discussed in recent years. It is a serious problem not only for adults, but also for students, and it has serious implications for people's productivity and learning status in public. Secondary school is an influential transition period from immaturity to maturity, when students first face enormous external pressures from school, family and society, as well as self-induced distress, and as a result, numerous mental health problems arise during this period. A researcher administered the Mental Health Test (MHT) in different types of secondary schools in Beijing, Shanghai and Guangzhou to investigate the mental health status of students. The test includes 6314 junior high school students, covering all grades and genders. The results of the questionnaire revealed the highest detection rate of learning anxiety at 44.7%, followed by physical symptoms (10.8%) and tendency to blame oneself (10%). The problem of learning anxiety becomes more severe as the grade level rises [1]. According to previous studies, it was found that the three main external factors affecting students' mental health are family, school and society [2]. Among them, interpersonal relationships directly or indirectly affect adolescents' anxiety, and excellent interpersonal relationships can alleviate adolescents' learning anxiety to a certain extent [3]. The main interpersonal relationships that have an impact on adolescents are the parent-child relationship, the teacher-student relationship, and the peer relationship [3].

The author of the current paper will first discuss the concept of interpersonal relationships in junior high school students, the definition of learning anxiety and current research status, then discuss the impact of three types of interpersonal relationships on learning anxiety in junior high school students, and finally provides educational insights. The purpose of this paper is to explore the relationship between interpersonal relationships and learning anxiety, to delve into the factors that influence learning anxiety, and to understand the causes of learning anxiety in junior high school students. The

research findings will establish a foundation and provide theoretical support to alleviate learning anxiety for junior high school students and help schools and families better educate junior high school students.

2. A study on the definition and current status of interpersonal relationships and learning anxiety among junior high school students

2.1 Defining interpersonal relationships for junior high school students

Parentage is initially used in genetics and refers to the biological blood relationship between parents and their off springs. In psychology, it refers to the mutual relationship between parents and children, one of the two most important relationships in the primary stage of human beings [4]. The parent-child relationship in this paper is mainly understood in a psychological and educational sense and refers mainly to the mutual relationship between secondary school students and their parents, including parent-child relationships based on blood relations and those based on legal relations. Parent-child relationships are critical for healthy adolescent development in the family environment. Positive and effective parent-child relationships result in adolescents feeling a higher degree of acceptance by their parents, which leads to more positive self-evaluations and perceptions, and, consequently, more positive performance in learning. In contrast, parent-child conflict can lead to lower self-esteem, more negative emotions, attention deficit disorder, and anxiety, among other behaviors and emotions.

The teacher-student relationship is the mutual relationship formed between teachers and students in education and teaching and is a special kind of social and interpersonal relationship. As the central interpersonal and social relationship in school life, the teacher-student relationship subtly influences students' academic growth[5]. A good teacher-student relationship is necessary for the successful completion of teaching tasks and a concrete expression of the value and meaning of life of teachers and students in educational and teaching activities. Good teacher-student relationships can motivate students to learn, help them be close to their teachers and build trust, and benefit their mental wellness. Healthy teacher-student relationships demonstrate education, equality, diversity, and openness, mainly in terms of teacher-student interaction, tolerance, mutual assistance, and dialogue, which play a role in effective information transfer, educational atmosphere revitalization, and students' individual development promotion.

Peer relationships are a significant form of interpersonal relationships, which are spontaneous collaborative relationships formed between young people of the same or similar age due to shared interests and goals. As they grow up, secondary school students spend more time interacting with their peers than with adults and elders. A study of interpersonal interactions among secondary school students found that peers are the first object of interaction for students to play, share and support after school and individual adolescents have a higher degree of need for emotional support from peers than they do as children [6]. Peer relationships significantly impact students' behavior, cognition, emotions, and healthy development of personality and social adjustment and play a unique role in individuals' social development and psychological well-being as they grow up.

2.2 Definition of learning anxiety among junior secondary school students and the current state of research

The current study collected a wide range of research on learning anxiety in China, covering different age groups, different occupations, different regions and so on. Researchers generally agree that learning anxiety is a negative emotional response to the learning process, and it generally has a negative effect on learners and is one of the most common factors affecting learning. Currently, there is no unified definition of learning anxiety in academia worldwide. In China, there is a view that learning anxiety is mainly manifested as fear of negative evaluation by teachers or parents, anxiety and fear of examinations, fear of asking questions in class, tendency to avoid or withdraw, and in

severe cases, symptoms such as insomnia and nightmares [7]. A questionnaire survey of junior high school students from different regions found that the current level of learning anxiety among junior high school students generally increases with grade level, and one study found that the detection rate of learning anxiety was higher among girls than boys, and junior high school students in the central and western regions were more likely to have anxiety problems than those in the northeastern and eastern regions [1,8].

The influencing factors that affect adolescents' learning anxiety are mainly classified as endogenous and exogenous ones. Endogenous factors include personality traits, self-esteem, and achievement motivation, while exogenous factors mainly include family, school, and social culture [7]. Family and school are the main external environments that junior high school students are exposed to during their growth process, and these external contexts have a strong influence on all aspects of junior high school students. The main influencing factors in the family are parent-child relationship, family parenting style, family structure, and family social status [9]. The educational environment attains three main subsystems which are influenced by teachers, peers and the school environment. The influencing variables involved in the teacher subsystem are teacher-student relationship, teacher education style, and teacher quality, the influencing factors included in the peer subsystem are peer relationship, and two influencing variables in the school environment subsystem are campus culture and classroom climate [10].

A search of "junior high school students' learning anxiety" on Zhiwang and Wanfang and a visual analysis revealed that the existing studies on junior high school students' learning anxiety target the current state of research on adolescent learning anxiety, the subject learning anxiety, the influence of parents on learning anxiety, the influence of interpersonal relationships at school on learning anxiety, the relationship between learning anxiety and the relationship between learning achievement, the influence of learning stress on learning anxiety, and the factors affecting examination anxiety.

3. Analysis of the influence of interpersonal relationships on learning anxiety among junior high school students

3.1 Influence of parent-child relationship on learning anxiety

The parent-child relationship, one of the family's most basic and essential relationships, is incredibly intimate. Parents' expectations of their children's schooling thus subconsciously influence children's academic development and performance. The parent-child relationship is the most important social relationship during adolescence and is an essential factor influencing students' physical and mental development [4]. The role of parent-child relationships in influencing emotional health issues has become vital since 1990s. Positive parent-child relationships can help adolescents to have a higher level of emotional regulation and thus can reduce the likelihood of developing anxiety. The better the parent-child relationship, the better the adolescent's ability to regulate anxiety.

According to research studies, healthy parent-child relationships are negatively associated with academic anxiety. The healthier the parent-child relationship is, the lower the children's academic anxiety level will be [11]. A healthy parent-child relationship highlights acceptance, encouragement, love, democracy, trust, rewards, and tolerance. These qualities positively contribute to a healthy and trusting parent-child relationship. Positive parent-child relationships make secondary school students more likely to be successful, cooperative, and less anxious [12]. Unhealthy parent-child relationships are positively associated with academic anxiety. Unhealthy parent-child relationships underscore rejection, exclusion, dominance, authoritarianism, mistrust, punishment, and hostility. Research has shown that unhealthy parent-child relationships combined with parental pressure and expectations can predispose children to academic anxiety [11]. Meanwhile, low levels of academic anxiety are associated with a healthy parent-child relationship. In particular, the study noted that students who receive more emotional warmth from their fathers had less academic stress and anxiety. Positive attitudes such as parental involvement, acceptance, and support can enhance children's motivation to improve their learning ability and academic performance, thus reducing the chances of developing

learning anxiety. Meanwhile, emotional support from fathers enhances their children's ability to cope with academic stress, thereby reducing the probability of anxiety [13]. In contrast, children who grew up under harsh parental punishment and denial may gain more academic burdens and academic stress.

Junior high school students are at a critical stage in adolescence when they psychologically demand independence and desire to be understood and treated as adults. Although the academic burden in secondary school is heavy, and parents are less likely to be able to provide direct academic support, frequent effective parent-child communication and practice help to release children's academic anxiety, and pass on parents' positive attitudes and values to their children, thus facilitating their children's adjustment to school and preventing academic anxiety to a greater extent.

3.2 The impact of teacher-student relationships on learning anxiety

A review of the relevant literature revealed an overall negative relationship between teacher-student relationships and learning anxiety in junior high school students.

Shi Yaojiang et al. investigated the current situation of learning anxiety and its relationship with academic performance among 9,250 rural junior high school students in Shaanxi Province using a questionnaire, and found a significant negative relationship between teacher-student relationships and learning anxiety among rural junior high school students [14]. The analysis concluded that the learning of rural junior high school students is primarily acquired through the teacher route, and therefore the quality of teacher-student relationships primarily affects the learning and psychological well-being of rural junior high school students. When junior high students have a positive relationship with their teachers, they are more emotionally engaged and thus reduce their learning anxiety, which further contributes to their academic achievement [14]. Zhang Yuyin administered the Teacher-Student relationship Scale and the Mental Health Diagnostic Test (MHT) questionnaire to 400 junior high school students. After collating and analyzing the results, she found that there were significant differences in conflicts between female and male junior high school students' teacher-student relationships, with girls having better relationships with their teachers than boys [15]. Intimate and reactive teacher-student relationships were negatively related to learning anxiety, with a significant negative correlation with intimate teacher-student relationships and positive correlations between conflictual and avoidant teacher-student relationships and learning anxiety. In addition, the relationship between teachers and students in middle school shows that they are both dependent on the teacher and eager to express themselves, and intimate teacher-student relationships allow students to have positive emotional experiences, which can reduce anxiety [15]. Therefore, teachers at the junior high level should focus on the construction of teacher-student relationships, while giving students appropriate power and freedom of expression under the premise of dominance.

A proper teacher-student relationship is one of equality, democracy, and harmony. In everyday learning, there is a tendency for secondary school pupils to enjoy a subject because they prefer the teacher. Similarly, it is not uncommon for students to be criticized by their teachers and therefore not be interested in the class. The researcher investigated the status and causes of mathematics anxiety among junior secondary school students and found that mathematics anxiety among junior secondary school students increased with age and was higher among girls than boys, with teachers' assessment methods being the main cause of anxiety [16]. The teacher's assessment of the student can affect the teacher-student relationship, have an impact on the student's interest in learning, and may exacerbate students' levels of learning anxiety. Some researchers investigating the impact of teacher feedback on English learning anxiety in junior high school students have found that positive teacher feedback, such as positive praise and assessment of a student's specific accomplishments and simple verbal praise, can reduce English learning anxiety in most cases [17]. Negative feedback can make students feel anxious, and different types of negative feedback can have different levels of impact; for instance, direct error correction such as having students repeat answers and criticism can make students feel more anxious, but teacher-led error correction can have a positive impact [17].

While teacher-student relationships are not the primary cause of learning anxiety, more intimate teacher-student relationships can stimulate positive academic emotions in students and thus reduce

anxiety levels. Also, teacher assessment and feedback to students can affect learning anxiety levels. It is therefore vital for teachers to focus on building a healthy and harmonious teacher-student relationship with their students.

3.3 The effect of peer relationships on learning anxiety

People need peer relationships throughout their lives, and peer relationships in adolescence are essential for social isolation. Peer relationships are an important source of stress for secondary school students. Studies have shown that the closer the peer relationship, the more it reduces anxiety among secondary school students; also, the more negative and cold the attitude of peers hold and the more distant the relationship is, the higher the level of loneliness adolescents will perceive, which in turn induces learning anxiety [18]. Being welcomed and accepted by peers increases adolescents' sense of well-being and identity, positively impacting learning self-confidence. Young people with high self-confidence believe they can handle relationships well in interpersonal interactions, not feel too much pressure when faced with peer expectations, and adequately face and overcome their learning difficulties and anxiety.

There are many reasons for poor academic achievement and correspondingly high anxiety levels, including rejection or neglect by peers, which can affect secondary school students' mood changes and lead to lower academic achievement and learning anxiety. In addition, social support from various sources plays a crucial role in alleviating learning anxiety. However, the degree of significance of peer relationships increases as students grow up. Foreign scholars have found that secondary school students with higher-quality peer relationships are more likely to acquire academic achievements and have lower levels of learning anxiety [19]. Their peers influence secondary school students' academic achievement. For junior high school students, peer support significantly affects their academic performance. Research has found that levels of academic anxiety predict peer status and acceptance in junior high school students and that high academic anxiety can lead to a range of problems, such as peer rejection, loneliness, and academic underachievement [19]. Other studies have also found that the higher the grade level is, the greater the effect will occur between academic anxiety and peer relations.

3.4 The effects of parent-child, teacher-student, and peer relationships together on learning anxiety

Parents, teachers, and peers are adolescents' primary objects of interaction, and relationships with all three are significant to their psychological development. Many researchers have examined the relevance of students' peer, teacher-student, and parent-child relationships and the impact of all three together on academic anxiety, offering both a dominant-subordinate perspective and an integrative perspective.

The dominant-subordinate perspective suggests that one relationship is significant in the adolescent interpersonal network, taking the highest position of decision. This relationship influences the development of other relationships, making them subordinate, thus constituting a dominant-subordinate model of adolescent interpersonal relationships [20]. In addition, researchers argued that junior high school students hold an optimistic attitude toward academic tasks and positive relationships with peers and teachers when holding positive relationships with their parents. Thus positive parent-child relationship could reduce the chance of learning anxiety. However, other researchers believe that the teacher-student relationship is the most important interpersonal relationship because teacher-student relationships significantly impact adolescents' parent-child and peer relationships. Thus, the teacher-student relationship has the most significant impact on academic anxiety. Meanwhile, compared to other interpersonal relationships, peer relationships last longer, require closer interactions, and are richer in content. The formation and development of peer relationships also directly affect adolescents' psychological development [20]. However, based on current findings, it is difficult to explain and clarify which of the parent-child, teacher-student, or peer relationships is the dominant part.

The integrated view holds that teenagers' parent-child, peer, and teacher-student relationships influence each other, which claims that neither a solid causal relationship exists nor one relationship is utterly independent. The environment where teenagers live is an organic whole composed of parents, companions, and teachers. The dynamic environment comprehensively affects the development of teenagers. Therefore, the parent-child, teacher-student, and peer relationships should be equally essential as indispensable and essential interpersonal relationships.

4. Educational Inspiration

This study found that positive parent-child relationships from fathers, such as emotional warmth and understanding support, helped young students to relieve academic stress and prevent academic anxiety. Compared to mothers, the presence and guidance of fathers can give children a new perspective and approach to preventing and dealing with the problems caused by academic stress. Parents listening carefully to their children can function as a prerequisite to establish a good parent-child relationship. Parents listening patiently to what their children say and actively maintain the parent-child relationship can help earn their children's trust and affection. Although the study burden in secondary school is heavy and parents are less likely to be able to provide direct academic support, children would be appreciated if parents frequently communicate with them. Good communication practices help parents to pass on their attitudes and values to their children, thus facilitating their children's adjustment to school and preventing academic anxiety to a greater extent.

Teacher-student relationship is one of the most critical factors in causing teacher-derived learning anxiety. An excellent and harmonious teacher-student relationship will help prevent and reduce teacher-derived learning anxiety [21]. Teachers need to work on strategies that prevent and reduce students' teacher-derived learning anxiety. Besides, teachers should develop an educational concept of respect, understanding, and acceptance. Teachers should resolve conflicts and contradictions between them and students and establish new teacher-student relationships with students. Meanwhile, teachers should view each student's personality and individual differences in an equal and developmental light, treat them equally, and teach them according to their abilities to ensure that students are at a moderate level of learning anxiety. Teachers should respect students and encourage them to express themselves. Teachers can learn to listen patiently, put themselves in the shoes of students and understand their thoughts and feelings, and adjust the content and methods of education according to the psychological level of students. Accordingly, the quality of teacher-student relationship will be promoted and thus student learning anxiety of teacher origin will be prevented and reduced.

Teacher evaluations and feedback affect the relationship between teacher and student, and the relationship between teacher and student affects the student's academic mood. When students receive negative feedback, they have negative emotional experiences which are built up during the learning process, leading to anger, anxiety, shame, and other mood [22]. When students receive positive feedback, they tend to positively engage with the content and learn pride, complacency, and other poor performance. Therefore, teachers need to be careful when giving assessment and feedback. Teachers can adopt flexible evaluation strategies based on different student situations and analyze specific problems on a case-by-case basis. Teachers need to fully understand the emotion regulation mechanisms of students to help students adjust to the optimal level of learning motivation.

As the teacher appraisal system is further improved and standardized, teachers' professionalism is enhanced, and their sense of moral responsibility is improved. Meanwhile, introducing a series of the rule of law systems can establish a platform for teachers to build a harmonious teacher-student relationship, thereby reducing student learning anxiety. Improving teaching methods, implementing activities in line with students' interests, and providing more opportunities for students to have a voice can also alleviate students' anxiety. Finally, by encouraging secondary school students to spend more time with their teachers outside of school hours and by increasing educational technology, schools will solve the problems of the 'generation gap' between teachers and students.

In peer relationship interactions, the frequency of communication and the evaluation of relationships are vital elements for students to create a peer relationship atmosphere of mutual help and progress. At the same time, the herding effect of peer groups correctly applied to junior high school students' learning can monitor learning and improve academic performance, and thus alleviating learning anxiety. For example, teachers can suggest boys and girls to make a study group together. In this case, girls tend to have a more positive attitude toward learning, which to a certain extent, reverses the attitude of boys toward learning. Collaborating with peer groups can help student complete their learning tasks effectively and experience more positive learning emotions thus reducing their learning anxiety. When students are frustrated with their studies and have negative academic emotions that they cannot resolve independently, the peer group should play a social and supportive role in helping them.

5. Conclusion

Excessive anxiety creates negative emotions of fear and tension, which can make teens lose interest in learning and then affect their quality of learning and life. Therefore, it is necessary to conduct in-depth research on learning anxiety. By analyzing and comparing the existing literature on the influence of interpersonal relationship on the learning anxiety of junior high school students, this study found that healthy parent-child relationship, teacher-student relationship and peer relationship were negatively correlated with learning anxiety respectively, while unhealthy interpersonal relationships were positively correlated with learning anxiety for junior high school students. Three interpersonal relationships were examined from different perspectives for their impact on learning anxiety in junior high students. Positive relationships play a role in the production and relief of learning anxiety in junior high school students. Currently, most existing studies use questionnaire methods for quantitative analysis and lack in-depth investigation on interpersonal relationships on learning anxiety in junior high school students. In addition, most studies use only short-term sampling surveys over a specific period of time, and medium and long-term monitoring surveys are insufficient in use. In addition, there is little literature on the impact of other types of relationships on learning anxiety in junior high school students. It is hoped that further in-depth studies on these issues can be performed in the future.

References

- [1] Tao, L., Zhang, Q., Guo, S., Liu, J., et al. Study on the psychological health condition among junior and senior high school students in Beijing, Shanghai and Guangzhou. *Journal of HYGIENE Research*, 2015, 144(57): 59-63.
- [2] Gao, P. Analysis of the factors influencing school children's mental health. *Journal of Tianjin Normal University (Social Science)*, 2002(2): 76-80.
- [3] Xi, W., Ma, L. Influence factors and group difference in adolescents' mental health: A multilevel analysis based on CEPS data. *Statistics & Information Forum*, 2018, 33(4): 116-123.
- [4] Zhou Z. Parent child relationship and depression in junior high school students: Mediating effects of self-esteem and emotional resilience. *Psychological Development and Education*, 2021, 37(6): 9.
- [5] Zhou, W., Bian, G The impact of teacher-student relationship on students' academic performance -- a summary of empirical research based on the relationship between teacher-student relationship and academic performance. *Foreign Education Research*, 2020, 47(9): 17.
- [6] Zhang, Y. A study on the relationship between peer relationship, school belonging and campus bullying among junior high school students Diss. Southwest University, 2020.
- [7] Cheng, G., Yuan, G. A preliminary study on learning anxiety. *Journal of Shenyang Normal University (Social Science Edition)*, 2005, 29(6): 21-23.
- [8] Zhang, Y., Jin, J., Yu, G. A meta-analysis of the detection rate of mental health problems among junior high school students in mainland China from 2010 to 2020. *Advances in Psychological Science*, 2022, 30(5): 965-977.

- [9] Zhou, Y. The main family environmental factors affecting the mental health of primary and secondary school students. *Journal of East China Normal University (Educational Sciences)*, 2000, 18(2):19-24.
- [10] Wang, H., Wang, X., Li, D. A research on the adolescent's mental health in schools as an ecological system. *Journal of Northeast Normal University (philosophy and Social Sciences)*, 2016, 4:157-160.
- [11] Luo, J. The influence of parental rearing patterns on interpersonal pressure and learning pressure of high school students." *Mental Health Education in Primary and Secondary Schools*, 2019, 36: 4
- [12] Han, J. Good parent-child relationship of take your time. *Education*, 2018, 21: 69-69
- [13] Shree, P. Relationship between parent-child relation and children's academic anxiety. REDSHINE Publication, 2020, 3.
- [14] Shi, Y., Min, W., Chang, F., Wang, H. Study anxiety of rural junior high school students and its relationship with academic performance. *Chinese Journal of Mental Health*, 2016, 30(11): 845-850.
- [15] Zhang, Y. The relationship between teachers and students to study on the relationship between the mental health of junior high school students, Northeast normal University, 2013.
- [16] Zhang, S., Qu, C. & Li, P. Investigation and countermeasures of mathematics anxiety in junior high school students. *Journal of Mudanjiang Institute of Education*, 2010(4):110-111.
- [17] Yang, X. Teachers' feedback impact study of junior high school students English learning anxiety. Changsha: Hunan normal university, 2020.
- [18] Greca, A., Harrison, H. M. Adolescent peer relations, friendships, and romantic relationships: Do they predict social anxiety and depression? *Journal of Clinical Child & Adolescent Psychology*, 2015, 34(1).
- [19] Zhu, Q. The influence of parent-child relationship, teacher-student relationship and peer relationship on the academic achievements of key junior high school students. *Mental Health Education in Primary and Secondary Schools*, 2019, 31(5).
- [20] Zhou, Q. Research on the strategy of building a new harmonious teacher student relationship in colleges and universities. *Hubei Agricultural Mechanization*, 2020, 2: 2.
- [21] Qu, W. The relationship between teacher-student relationship, academic self-efficacy and academic adaptation of junior high school students. Northeast Normal University, 2011.
- [22] Jiang, Z., Xu, Z. The relationship between academic emotion, mental resilience and academic performance of Junior high school students. *Chinese journal of health psychology*, 2017, 2: 290-293.