Relationship between parental anxiety and students’ academic stress at secondary level

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Abstract

Academic stress and parental anxiety are two crucial factors for the academic achievements of students. Both of these factors play a key role in academic success. This research aims to find the relationship between parental anxiety and students’ academic stress at the secondary level. The population was selected from the students of grade 9th studying in various public schools of Tehsil Gujrat. A two-stage Stratified Random Sampling Technique was used for sampling. Out of a total of 89 boys and 94 girls secondary schoolers working at Tehsil Gujrat, twenty (10 boys and 10 girls) were randomly selected. Simple percentage formula, Regression, neural network model, and Independent sample t-test were used to analyze the collected data. The analysis of students related to research questions indicated that academic stress affects academic achievements, parents’ anxiety, mental health, learning process, social behavior, cognitive skills, learning style, communication between the teachers and students, and extra-curricular activities of the students.

Key Words: Academic stress; parental Anxiety; students, secondary level.
1. Introduction

It has been proved in many studies that academic achievement is strongly connected with emotional intelligence (Costa & Faria, 2015; Ahmed et al., 2019). It has been determined that school students who secured higher grades in an examination of emotional intelligence were enabled to handle the academic stress in a better way in the examination. Academic nervousness and anxiety are common psychological ailments in school-going children. Mulvenon et al., (2005) concluded in a study that in most situations, academic anxiety can be underestimated. It is associated with alleged social support. Many researchers concluded that over anxiety lowers the students’ academic achievements (Rapee et al., 2005; Halimi et al., 2020). The high hopes of parents in educational activities are the most negative factor for the low academic achievements of students (Tillfors et al., 2011). The instructors, administrators, peers, and counselors should try to be aware of the anxiety and mental health in the students and guide the ways of coping with academic stress and anxiety. Anxiety and stress are physiological and psychological states characterized by emotional, cognitive, physical, and behavioral components. Academic anxiety means unease in academic activities that may be due to the absence or presence of psychological stress. Anxiety may occur as a consequence of stress and can affect the memory and learning process (Lee et al., 2020).

Anxiety and academic stress are anything that places additional demands on an individual's ability to cope with academic stress. Approximately all children will experience academic anxiety and pressure in school life. Academic pressure is anything that imposes additional demands on an individual's ability to cope, generally academic pressure (Sahu et al., 2016). Some of the factors that can cause stress include low socioeconomic status, long school hours and family education history, unrealistic beliefs, poor academic performance, tutor and teacher requirements, and poor academic performance. Academic stress may be conceptualized as a learner’s interface between cognitive judgment, psychological or physiological response to the stressors, and environmental stressors (Mazza et al., 2020). Academic difficult courses, overloads, insufficient time to study, results from exams, the workload in a year, high family expectations, and low motivation generate academic stress among the learners. The learners have various goals, expectations, and values that they desire to fulfill. In the present highly competitive globe, learners face different academic difficulties including anxiety during tests, problems with homework assignments, exam stress, and inability to understand the subjects. Though the learners experience some degree of academic stress and anxiety before and during the examination, academic anxiety can blight learning and affects the performance of the learners in the examination. Academic stress and anxiety are common problems across cultures, ethnic groups, and countries, and must be viewed in context (Hyland et al., 2020).

Stress is something that creates strong feelings of worry and sadness. It cannot be harmful until a person takes it overwhelmed and isolated. If a student is getting stressed a little bit about the examination it means that the learner cares about the academic achievements. This little bit of stress forces the learners to work hard in the examination and achieve good grades (Hoge et al., 2017). In Asian countries, parental stress has a greater impact on test anxiety. Asian ethics emphasizes family glory, filial piety, and belief in hard work and the efficiency of hard work. High school academic performance is one of the main ways for children to repay unlimited debts to their parents and to be filial to their parents. In other words, students work not only for themselves but also for the honor of their families. The importance that Asian families attach to academic performance is reflected in the strong pressure from parents to achieve academic success, which may put these students under considerable psychological pressure. It is hypothesized that this constant pressure to succeed in school plays a role in the development of test anxiety (Chen, 2012; Ilias et al., 2018).
Academic anxiety becomes a dilemma, and a solution is needed only when it becomes so severe that students can no longer work effectively. If academic anxiety is not handled properly, it will have serious consequences, which may have various extreme long-term effects, including making students dislike a subject or teacher, procrastinating, lying to their parents, abandoning poor academic performance, and failing courses. Pursue to attract their interest, avoid socializing with peers or friends, and may drop out of school (Persike & Seiffge-Krenke, 2016; Eriksen, 2021). In the development and persistence model of anxiety in children and young adults, parents’ activities are involved, including excessive control, lack of warmth, and spreading anxiety. Different parental responses are expected to promote social maturity in childhood and adolescence, which is consistent with normative growth theory, but age is rarely considered in research on childcare and anxiety (Osborn et al., 2020).

1.1. Theoretical Framework

Various researchers including (Das et al., 2014; Borelli et al., 2015; Kaliisa, 2019) have researched the effects of parental anxiety and academic stress on students’ academic achievements. Several studies have been done to find the factors that create academic stress in students. Several factors influence the student’s academic achievements including teacher support (Sharma, 2014) and classroom environment (Sharma et al., 2016). Some specific characteristics of pupils and their parents’ education also play an important role in students’ academic achievement (Sharma & Pandey, 2017). A lot of researchers and instructors including (Kumaraswamy, 2013; Alsulami et al., 2018; Jeong et al., 2019) presented a negative impact of anxiety and academic stress on the student’s academic achievements in the literature. Stress is discernment of physical tension or emotions. Many events happen in an individual life that diverts him to bad feelings and emotions like nervousness, frustration, and anger (Deb et al., 2015). Stress can be positive for some times but prolonged stress can lead to a serious health condition (Hystad et al., 2009). Stress is an individual body’s reaction to demand or challenge (Bhujade, 2017).

Most of the time, parents entered in the scope of anxiety with such emotions as care, affection, safety, and happiness. Along with themselves, they make their children extreme conscious. Parental concerns about their child started when the child is out of school even. They start thinking about school choice at a very early stage. Afterward when children start climbing the advanced levels of education parental anxiety may also increase. It is all about expectations (Maajida Aafreen et al., 2018). Numerous studies concluded that parents having high expectations from children are more likely to be conscious which leads them towards anxiety. Parental confidence in the child is a blessing. Instead of having high expectations, the parents should give self-confidence to their children. They will release their anxiety with these feelings that their parents have confidence and trust in their abilities and efforts (Subramani & Kadhiranavan, 2017; Pajarianto, 2020; Mosanya, 2021).

Eweniyi, (2009) observed that students are under greater pressure than others, but they rarely seek help. Due to the educational expectations of parents and teachers, homework and homework, examination system, and other factors, academic pressure may arise. Due to their expectations of excellence and the expectations of their parents and teachers, students may experience academic pressure (Dhull & Kumari, 2015). Essel & Owusu (2017) proposed that unrealistic parental expectations are the main source of student stress. The education system also helps increase stress levels. Some sources of stress in the education system include overcrowding of conference rooms, insufficient resources and facilities, excessive working hours, and expectations of rote learning. Students report that they are under a lot of pressure during university, especially preparing for exams, competitions, and mastering the syllabus within a short period. Other sources of academic stress include excessive workload, unhealthy competition, time pressure, lack of financial and financial management, difficulties in managing personal and academic life, and poor self-perception of students (Chemornas & Shapiro, 2013). Saharia & Goswami, (2020) believed that if stress is not managed effectively, it can cause serious problems. Also,
when a person is under long-term stress, they are likely to suffer from physical and mental illness at the same time. The field of health psychology focuses on how stress affects physical function and how people use stress management techniques to prevent or reduce illness. Stress can be applied to people due to abnormal physical conditions (such as overheating or excessive cold, illness, lack of oxygen, or exposure to bright light). Standing for a long time, climbing a mountain, or continuously submerging in water will also present strong requirements for the individual to adapt.

1.1.1. Parental Anxiety and Students’ Academic Stress

Many factors like parents’ expectations and family educational background create pressure on pupils to show good performance in curricular and extra-curricular activities and hence academic anxiety increased (Mahajan, 2015). Neill et al., (2019) stated in a study that academic stress can be defined as anything that exacted additional expectations on one’s abilities to cope. Almost, every pupil feels academic stress in his school’s life. The teacher hopes that the in-service students will compete it on time. Students may underestimate the time required to fully complete reading and writing assignments and print copies of assignments (Shin, 2014). Academic pressure and its manifestations as depression, tension, exhaustion, and anxiety have always been a common theme for people working in various professions and institutions (Yeo & Lee, 2017). Rayle & Chung, (2007) surveyed to discover the influence of parental anxiety and academic pressure on the academic performance of high school students. The results of the study show that parents who are anxious about their children going to school do well academically. Academic pressure also interferes with students' academic performance.

School stress can be conceptualized as student interactions between environmental stressors, assessment of student cognition, management of learning stressors, and psychological or physiological responses to stressors. School stress is a problem common to all countries, cultures, and people and must be seen in context (Guo et al., 2018). Every student aspires to achieve academic success to earn respect, family pride, and social mobility. This has led to very high academic requirements and special pressure on students, especially young people. Due to the pressure and the requirement to pass exams, students cannot enjoy their academic life, which becomes insignificant and burdensome for them (Plexousakis et al., 2019). In some cases, students will exhibit various emotional reactions that can inhibit the test and impair the test results. This negative emotional response is understood as anxiety. It is an unpleasant emotional response produced by external stimuli, which is regarded by the individual as threatening, and therefore will lead to changes in the subject’s physiology and behavior before the examination (Xu et al., 2017).

Dube et al., (2018) conducted a study to emphasize the impact of parental anxiety and academic pressure on the academic performance of high school students. The results of the study show that parents’ anxiety has a positive effect on students’ academic performance. When academic pressure is denied or becomes extreme, students experience psychological and physical deterioration. Hyseni Duraku & Hoxha, (2018) conducted statistical research to observe the relationship between parental anxiety, academic stress, and students’ academic achievement. The research concluded that the home environment had a great impact on the student’s academic achievement. Students with a good learning home environment improve the student’s academic achievement and learning abilities.

Brook & Willoughby, (2015) directed research to determine the effects of parental anxiety and academic stress on the academic achievements of 10th class in a secondary school. The results of the study indicated that the parents who feel anxiety about their children for academic purposes, their children perform well in schools. Rehman, (2016) conducted a study to find the relationship between the parenting style, academic stress, and students’ academic achievement. The consequences of the study indicated that there was a statistically negative effect of academic stress on the student’s academic achievements while parental anxiety positively affects the student’s academic achievements. Singaravelu,
(2010) investigated the effects of parental anxiety and academic stress on students’ academic achievements in Mathematics of secondary school students. The study found that more the academic stress less will be the students’ academic scores and vice versa. The study also found that the home environment also plays an important role in students’ academic achievements. The parents that feel anxiety for their children give better performance in their academic results.

According to Arusha & Biswas, (2020), academic stress is a key issue in academic rings. Many scholars including (Hlalele, 2012; Brady et al., 2018) researched academic stress to find the valuable factors that create stress for the students. Mahato & Jangir, (2012) investigated to study the academic stress in adolescents. The results of the study found that most of the pupils experienced academic stress. The academic stress increased near the examination and it became less when the examination was far. It is also concluded in the research that environment and type of school also had a significant role in the student’s academic stress. The school has a good environment and proper planning created less stress as compared to the school not having a good environment and proper planning. The study also revealed that the children, whose parents feel anxiety for their children, perform well in their academic achievements and vice versa. Rentala et al., (2019) conducted a study to find the relationship between parental anxiety, academic stress, and academic achievement in a private higher secondary school. The participants of this study were 400 young students. The main purpose of the study was to find the factors that create stress among the students. The results of the study indicated that inappropriate planning, extra-burden, teachers’ instructional strategies, and school environment are the main factor that creates stress among the students. The study also revealed that parents’ anxiety about the academic achievement of the students also plays an important role in the students’ academic achievements.

1.2. Purpose of the Study

Academic stress and parental anxiety play an important role in the academic achievements of students. Academic stress is the product of a bio-chemical process that occurs in the brain and body of the students at the same time and in such circumstances the attention level of the student increase in such situation where a student face or suffer from academic stress (Malak & Khalifeh, 2018; Gao et al., 2020). This stressful situation is the response to a stressful academic life, for example, the situation in which the student wants to complete school assignments on time, or wants to present a class project or an upcoming assessment (Hasan, 2018). When this state of academic stress occurs, depression becomes too much, the body withdraws as if helpless (Acosta-Gómez et al., 2018). The children of conscious parents are more likely to be conscious and felt more anxiety in studies. Parent anxiety improves the students’ academic achievements and academic stress also affects the academic achievements of students (Assari et al., 2019; Wang et al., 2020). The objectives of conducting this research study were (i) To measure the level of parents ‘anxiety about their children’s education (ii) To find out the relationship between parental anxiety and students’ academic stress at the secondary level. The findings of the study will help the parents, teachers, and students to improve their teaching-learning practices to get maximum output. Research Questions include:

1) What is the level of anxiety among parents of secondary school students?

2) What is the level of academic stress among students at the secondary level?

3) What is the relationship between parental anxiety and academic stress among students at the secondary level?

4) Is there any significant difference between the parental anxiety level of parents of girls’ and boys’ students at the secondary level?
5) Is there any significant difference between girls’ and boys’ academic stress at the secondary level?

2. Materials and Methods

2.1. Research Approach

A quantitative correlational study was conducted to assess the relationship and impacts of parental anxiety and academic stress on the students’ academic achievements at the secondary level. Parental anxiety was considered as a predictor variable and academic stress was considered as the criterion variable. The conceptual framework of the study is shown in figure 1.

Figure 1: Conceptual Framework of the study

2.2. The population of the study

The data was selected from the students of grade 9th studying in government schools of tehsil Gujrat. There is a total of 89 boys public schools and 94 girls public schools are working in tehsil Gujrat. All the students (boys and girls) studying in grade 9th of session 2019-2020 at public schools of tehsil Gujrat were considered as the population of the study.

2.3. Sample Size and Sampling Technique

Two stages disproportionate Stratified Random Sampling Technique was used for sampling. At the first stage, two strata’s (one for boy’s Secondary Schools and the second for girl’s secondary schools) were selected for sampling. Twenty (20) public secondary schools (10 boys and 10 girls) were randomly selected from Tehsil Gujrat. At the second stage, equal numbers of students from both strata were selected through a disproportionate stratified random sampling technique. Total 450 boys and 600 girls were studying at secondary level in the selected schools. 20 students from each school were randomly selected as a sample of the study. A total of 400 (200 boys and 200 girls) students were selected for data collection. The sampling technique used in this study is illustrated in figure 2.

Figure 2: Conceptual Framework of Sampling Technique Used in Current Study
2.4. Data collection instrument

The data for this research was collected using questionnaires.

2.4.1. Validity of Questionnaires

Validity is the degree to which a tool, survey measures what it should measure: validity is an assessment of its accuracy. Validity is important because it determines which survey questions to use and helps ensure that the questions that researchers use measure important issues. The validity of an investigation is considered to be the degree to which it measures what it claims to measure. For this research, its effectiveness is assured by experts in the educational discipline. Fourteen experts were asked to provide valuable suggestions on the content of the document prepared. The value of the content validity index (CVI) of the parental anxiety scale is 0.60 and the value of the student’s academic stress scale is 0.62. According to the standards established by Shultz and Whitney (2005), both values are acceptable. "For 14 subject matter experts (SMEs), a content effectiveness index (CVI) of 0.51 is sufficient."

2.4.2. Reliability of Questionnaires

Reliability relates to the degree to which the measurement of a phenomenon provides stable and consistent results. Reliability is also related to repeatability. For example, if repeated measurements of a scale or test under constant conditions give the same result, the scale or test is said to be reliable. Reliability is a very important validity test. Test scores can be highly reliable and effective for one purpose, but not another. An example often used for reliability and validity is weighing yourself on a scale.

Table 1: Mean, Standard Deviation and Reliability Coefficient on Scale Developed to measure Parental Anxiety Level

<table>
<thead>
<tr>
<th>No. of Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach Alpha Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3.21</td>
<td>0.794</td>
<td>0.921</td>
</tr>
</tbody>
</table>

Table 1 shows the value of Mean, Standard Deviation, and the reliability coefficient value of the pilot test for the parental Anxiety scale. During pilot testing, Cronbach Alpha reliability was applied to ensure the internal consistency on Scale Developed to measure Parental Anxiety Level. The value of the Cronbach Alpha Reliability Coefficient was 0.921. Landau and Everit (2004) recommended that a value above .70 of Cronbach Alpha Reliability Coefficient values will be considered as an acceptable value of reliability for a research instrument. So, the calculated value of the Cronbach Alpha Reliability Coefficient is 0.974. This value is suggesting very good internal consistency.
Table 2
Mean, Standard Deviation and Reliability Coefficient on Scale Developed to measure Students’ Academic Stress Level

<table>
<thead>
<tr>
<th>No. of Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach Alpha Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3.41</td>
<td>0.711</td>
<td>0.901</td>
</tr>
</tbody>
</table>

Table 2 shows the value of Mean, Standard Deviation, and the reliability coefficient value of the pilot test for the Students Academic Stress Scale. During pilot testing, Cronbach Alpha reliability was applied to ensure the internal consistency on Scale Developed to measure Students’ Academic Stress Level. The value of the Cronbach Alpha Reliability Coefficient was 0.901. Landau and Everit (2004) recommended that a value above .70 of Cronbach Alpha Reliability Coefficient values will be considered as an acceptable value of reliability for a research instrument. So, the calculated value of the Cronbach Alpha Reliability Coefficient is 0.974. This value is suggesting very good internal consistency.

2.5. Data analysis

The objectives of the study were achieved using various statistical techniques. The level of parental anxiety and students’ academic stress were analyzed by developing equal class intervals of the upper and lower limits of scores. Further, the relationship of parental anxiety and students’ academic stress were analyzed using regression which was used to explore the predictive relationship among variables. The t-test analysis was used to differentiate students’ academic stress between genders. The neural network analysis was used to explore the role of demographics in determining parental anxiety and students’ academic stress. The neural network model explained the importance of demographic variables for parental anxiety and students’ academic stress.

3. Results

This study was designed to find the relationship between parental anxiety and students’ academic stress at the secondary level. The data was collected from the students of grade 9th studying in various government schools of Tehsil Gujrat. There is a total of 310 public schools of girls and boys are working in District Gujrat. All the student’s boys and girls in grade 9th of session 2019-2020 studying in public schools of District Gujrat were selected as the population of the study. Two questionnaires one related to students and the other related to parents were formulated. A two-stage stratified sampling technique was used to select the sample. The data was collected on these questionnaires by developing five Likert scales strongly agree, agree, neither agree nor disagree, strongly disagree, and disagree.

The analysis was divided according to the questions of the study.

1. What is the level of anxiety among parents of secondary school students?

<table>
<thead>
<tr>
<th>Scores Ranges</th>
<th>Description</th>
<th>Parent’s Scores (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>38-51</td>
<td>High level</td>
<td>242 (60.5)</td>
</tr>
<tr>
<td>24-37</td>
<td>Moderate level</td>
<td>138 (34.5)</td>
</tr>
<tr>
<td>10-23</td>
<td>Low level</td>
<td>20 (5)</td>
</tr>
</tbody>
</table>

The result indicated that the majority of the parents showed a high level of anxiety followed by moderate.

2. What is the level of academic stress among students at the secondary level?
Table 4: Levels of Academic Stress in Students

<table>
<thead>
<tr>
<th>Scores Ranges</th>
<th>Description</th>
<th>Parent’s Scores (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>38-51</td>
<td>High level</td>
<td>239 (59.75)</td>
</tr>
<tr>
<td>24-37</td>
<td>Moderate</td>
<td>147 (36.75)</td>
</tr>
<tr>
<td>10-23</td>
<td>Low level</td>
<td>14 (3.5)</td>
</tr>
</tbody>
</table>

The results of Table 4 indicated that the majority of the students encountered a high level of academic stress followed by moderate.

3. What is the relationship between parental anxiety and academic stress among students at the secondary level?

Regression analysis was used to identify the predictive relationship among variables.

Table 5: Summary of Regression Analysis of PTSD as Predictor of Adjustment Problems in Woman Burn Survivors (N=200)

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental anxiety</td>
<td>0.398</td>
<td>0.159</td>
<td>0.157</td>
<td>75.042</td>
<td>0.000</td>
</tr>
<tr>
<td>Academic Stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The study explored that parental anxiety would be a significant predictor of academic stress in students. The summary of regression results confirmed the hypothesis that there was a predictive relationship between parental anxiety and students’ academic stress at the secondary level. [R²=.159; F (1, 398) = 75042, p<.01]. The 15.9% variation in the students’ academic stress is explained by parental anxiety. The R-value indicates the correlation among variables. The correlation indicated a significant positive relationship between parental anxiety and students’ academic stress.

3.1. Additional Analysis

Role of different demographic variables in effecting parental anxiety and students’ academic stress. A neural network was used to find out the predictive relationship between demographic factors and parental anxiety.

Table 6: Model Summary

<table>
<thead>
<tr>
<th>Relative Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
</tr>
<tr>
<td>Testing</td>
</tr>
</tbody>
</table>

If the relative errors are constant in the training and testing it gives the confidence about the model is correct. In the case of current research, the difference is very small for training and testing.

Table 7: Predictive Importance of Independent Factors

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Variables</th>
<th>Importance</th>
<th>Normalized Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Family System</td>
<td>0.318</td>
<td>52.6%</td>
</tr>
<tr>
<td>2</td>
<td>Family Income</td>
<td>0.606</td>
<td>100.0%</td>
</tr>
<tr>
<td>3</td>
<td>Residence Type</td>
<td>0.076</td>
<td>12.6%</td>
</tr>
</tbody>
</table>
The neural network model has also given the importance of prediction of demographics of the family system (nuclear, Joint), family income, and residence type (rural, urban) in determining parental anxiety. The result indicated that the most important predictor of parental anxiety was family income 0.606 (100% normalized importance) followed by family system 0.318 (52.6% normalized importance) and residence type 0.076 (12.6% normalized importance). Among the three factors, family income was contributing more as compared to the family system and residence type. The importance can be seen in Figure 3.

Figure 3: Importance of Prediction of Demographic Factor for Parental Anxiety

The relative errors of training and testing are very small hence, giving confidence about the model correctness.

Table 8: Model Summary

<table>
<thead>
<tr>
<th></th>
<th>Training</th>
<th>Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Error</td>
<td>1.003</td>
<td>0.977</td>
</tr>
</tbody>
</table>

Table 9: Predictive Importance of Independent Factors

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Variables</th>
<th>Importance</th>
<th>Normalized Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Family System</td>
<td>0.076</td>
<td>12.1%</td>
</tr>
<tr>
<td>2</td>
<td>Family Income</td>
<td>0.151</td>
<td>24.0%</td>
</tr>
<tr>
<td>3</td>
<td>Residence Type</td>
<td>0.146</td>
<td>23.3%</td>
</tr>
<tr>
<td>4</td>
<td>Birth Order</td>
<td>0.627</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The neural network model prediction of demographics indicated the role of the family system (nuclear, Joint), family income, residence type (rural, urban) and birth order is in determining the students’ academic stress. The result indicated that the most important predictor of students’ academic stress was birth order 0.627 (100%), followed by family income 0.151 (24% normalized importance), residence type 0.146 (23.3% normalized importance), and family system 0.076 (12.1% normalized importance). Among
the four factors, birth order contributed the most in determining the students’ academic stress. The importance is shown in Figure 4.

Figure 4: Importance of Prediction of demographic Factor for Students’ Academic Stress

Table 10: Independent Sample t-test Between Parental Anxiety and Gender

<table>
<thead>
<tr>
<th></th>
<th>Male (N=200)</th>
<th>Female (N=200)</th>
<th>t-test</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Anxiety</td>
<td>37.3600</td>
<td>37.4750</td>
<td>-.166</td>
<td>.868</td>
</tr>
</tbody>
</table>

Table 10 results indicated that no gender difference exists according to parental anxiety. The p-value is also greater than .005 thus indicating no significant difference in the parental anxiety of boys and girls. There is also no difference in means. Further, S.D showed a difference of 1.7 points indicating anxiety in boys’ parents as compared to girls.

5. Is there any significant difference between girls' and boys' academic stress at the secondary level?

Table 11: Independent Sample t-test Between Students’ Academic Stress and Gender

<table>
<thead>
<tr>
<th></th>
<th>Male (N=200)</th>
<th>Female (N=200)</th>
<th>t-test</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Academic Stress</td>
<td>37.7150</td>
<td>37.7150</td>
<td>.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 11 indicated that there was no gender difference in Students’ Academic Stress. The p-value is non-significant with equal means and almost the same S.D.
4. Discussion

A student is a focal point in the system of education. All the academic activities revolve around the students. Students seek guidance from their parents, teachers, peers, etc. among all of them the parents are the most influenced figure and the students’ not only get guidance and motivation from them but also follow the instructions given by them and the students' design and built their plans upon the expectations of their parents (Kirk et al., 2017; Ilmanto et al., 2021). In a country like Pakistan, education is perceived as a long-term investment. Parents plan the future of their children and wish to secure their future by educating them. Parents perceive that good education will be a predictor of a good career in the future for their children. In most cases, while thinking about the future of their children, parents experienced an over-equitable amount of anxiety (Butterfield et al., 2021). In such circumstances, students may have trouble and may experience stress while performing their academic activities. Such a phenomenon is called academic stress (Scherer et al., 2019).

In most causes anxiety transforms or transfers to the next generation from their parents. Under this interpretation Anxiety is somehow genetic trade. Children observe their parents taking tension and getting tense while performing their households, work, or jobs. And do the same under such situations. So, it can simply be concluded that the actions and reactions of the children are influenced by the style of problem-solving strategies adopted by their parents. But a large number of researchers concluded that anxiety is directed by environmental forces (Chow et al., 2018; Emerson et al., 2019; Ren et al., 2020).

Academic stress and anxiety are universal problems across cultures, ethnic groups, and countries and must be seen in their context. Every learner desires to achieve good academic grades to get respect social mobility and family pride. These high expectations and desires result in very high academic pressure on the learners. As a result of academic stress and demands to achieve good grades in the examination the learners are not able to relish their study life and it becomes a burden for them. Stress may be stated as any emotional, chemical or physical factor that create bodily or mental disorders. Chemical and physical factors that can create stress include infections, toxins, trauma, illnesses, and injuries of any kind (Ghatol, 2017; Apaola et al., 2019). A slight degree of strain and stress can be beneficial sometimes (Lee & Larson, 2000). Academic stress comprises a state of mind with great stress regarding foreseen challenges and expectations. The results of the study showed that parental anxiety and academic stress affect the students’ academic achievements. These results were according to the conclusions made by numerous researchers including (Shalev et al., 2020; Okubo et al., 2021).

5. Conclusion

The parents and children share a complex relationship. They attend a twofold relation facilitating each other. Parents acquire various psychological problems that may affect their children. Among others, parental anxiety was the one. The study revealed that parents were equipped with a high level of anxiety. Further, students also reported high academic stress. There was a relationship between parental anxiety and students’ academic stress.

Furthermore, parental anxiety had a predictive relationship with students’ academic stress. There was no difference evident on gender to students’ academic stress whereas parental anxiety level was observed higher in boys’ parents as compared to girls. While judging the demographic effect on parental anxiety and students’ academic stress, it was seen that monthly income had a maximum effect on parental anxiety. In the case of students’ academic stress, the birth order plays an important role in establishing the effect.
6. Recommendations

Based on the analysis of the students and parents’ questionnaires data, the following recommendations were made:

1) Parents should try to control their anxiety level towards the academic achievement of their children and also follow up their children's academic progress to decrease the academic stress of their children and to improve their academic achievements.

2) The institutions in general and teachers in specific should provide various learning experiences and should use various teaching techniques to minimize the academic stress of the students.

3) There should be strong coordination between the parents and the teachers to minimize the academic stress of the students and to improve the overall academic achievements.

Conflict of Interest

The author/s declared no conflict of interest.

References


