

SUPPORTING STUDENTS WITH ANXIETY IN THEIR STUDIES

Authors:

Tiiu Tammemäe (PhD)¹
Tallinn University (Estonia)

Hanna Allmäe ²
Tallinn University (Estonia)

Eleriin Sild ³
Tallinn University (Estonia)

Lectors:

Anikó Vargáné Nagy (PhD)
University of Debrecen(Hungary)

Ágota Szabóné Balogh (PhD)
Gál Ferenc University (Hungary)

...and two other anonymous lectors

Tammemäe, Tiiu, Allmäe, Hanna & Sild, Eleriin (2024). Supporting Students with Anxiety in Their Studies. *Különleges Bánásmód Interdiszciplináris folyóirat*, 10(3), 83-98.

DOI: <https://doi.org/10.18458/KB.2024.3.83>

Abstract

Anxiety is a prevalent mental health issue among children and adolescents, which can have a detrimental impact on their personal relationships and academic performance. This study aimed to identify the manifestations of anxiety in educational settings, the effects of anxiety on educational activities, and the types of support that should be provided to students with anxiety. The following research questions guided this study: 1) How is anxiety expressed among 13-14-year-old students when in school? 2) How does anxiety affect the 13-14-year-old students' educational activities? 3) What kind of support should be provided to students with anxiety at school? The participants were 26 students aged 13-14 from various Estonian schools. The data was gathered for analysis via interviews and a questionnaire. A mixed-methods approach was employed. According to the research, children experience anxiety both before and during a test or presentation. It appears that each student expresses fear at school in a different way. Students who learn remotely report feeling less anxious during class activities. This is because they do not have to answer in front of the class or turn on the camera when participating in online lessons. Furthermore, students aged 13-14 prefer to talk to their friends who are also experiencing anxiety than to adults who do not understand their anxiety. Finally, the students' answers revealed that the teacher should ask all the students with equal frequency to present their homework. It is also recommended that anxious students be supported by helping them recall what they have learned and use different methods to assess their knowledge. The students stated that they require a quiet and safe place to be alone at school. There is a need to raise awareness about anxiety symptoms and ways for teachers to support students.

¹ Tiiu Tammemäe(PhD), Tallinn University (Estonia). E-mail: tiiu.tammemae@tlu.ee

² Hanna Allmäe, MA Student, Tallinn University (Estonia). E-mail: hanna.allmae@gmail.com

³ Eleriin Sild, MA Student, Tallinn University (Estonia). E-mail: eleriinsild@gmail.com

Keywords: anxiety at school, 13–14-year-old students, supporting students, learning-related anxiety

Discipline: Pedagogy, Special Education

Absztrakt

A SZORONGÓ DIÁKOK TÁMOGATÁSA A TANULMÁNYAIK SORÁN

A szorongás olyan, a gyermekek és serdülők körében elterjedt pszichés probléma, amely káros hatással lehet a személyes kapcsolataikra és tanulmányi teljesítményükre egyaránt. A tanulmány célja, hogy azonosítsa az iskolai szorongás megnyilvánulási formáit, a szorongás tanulásra gyakorolt hatásait, valamint a szorongó tanulóknak nyújtandó támogatás típusait. Kutatási kérdések: 1) Milyen megnyilvánulásai vannak a szorongásnak a 13-14 éves diákok körében az iskolában? 2) Hogyan hat a szorongás a 13-14 éves diákok tanulmányi teljesítményére? 3) Milyen támogatást kellene nyújtani a szorongó tanulóknak az iskolában? A vizsgálatba 26 fő 13-14 éves érettségis vett részt különböző érettségis iskolákból. Az adatgyűjtés interjú és egy kérdőív segítségével történt. Eredmények: a válaszadó gyerekek szorongást élnek át az iskolában az írásbeli teszt vagy szóbeli előadás előtt és közben is. Úgy tűnik, hogy minden diák más-más módon fejezi ki a félelmet az iskolában. A távoktatásban résztvevő diákok, arról számoltak be, hogy kevésbé szoronganak az órai tevékenységek során, mivel az online órákon való részvétel során nem kell az osztály előtt felelniük vagy bekapcsolniuk a kamerát. A 13-14 éves diákok inkább beszélgetnek a szintén szorongó barátaikkal, mint olyan felnőttekkel, akik nem értik meg a szorongásukat. Végül a diákok úgy vélik, hogy a tanároknak minden diáktól egyforma gyakorisággal kellene kérnie a házi feladat bemutatását. Javaslatok: a tanárok a szorongó diákokat támogassák azzal, hogy segítenek nekik felidézni a tanultakat, és különböző módszereket alkalmazzanak tudásuk felmérésére. A diákok kijelentették, hogy szükségük van egy csendes és biztonságos helyre, ahol egyedül lehetnek az iskolában. Szükség lenne a szorongás tüneteinek tudatosítására, valamint annak megismertetésére, hogy a tanárok hogyan támogathatják a diákokat.

Kulcsszavak: iskolai szorongás, 13-14 éves diákok, diákok támogatása, tanulással kapcsolatos szorongás

Diszciplína: pedagógia, speciális oktatás

Introduction

There is a widespread perception that all people feel anxious at some point in their lives. In some circumstances, anxiety is also normal and inherent. Anxiety is one of the most prevalent mental health issues affecting kids and teenagers, which can negatively affect both their academic performance and interpersonal interactions (Moran, 2016; Junttila, 2016). According to Cohen (2013), there is a lot of competition and stress in schools these days, kids have longer school days, parents are always concerned about security and economics,

and our society is based on a win-lose situation where only few children can succeed. Children don't spend enough time outdoors, whether it's just enjoying nature or walking near their homes.

Children need downtime, where they do nothing, to process, absorb and learn from new experiences. Instead, children are constantly being directed to do something to avoid boredom. Students who exhibit signs of anxiety and depression are more likely to focus on irrelevant, distracting thoughts, which leaves them with less sustained attention for

cognitive activities and ultimately results in academic failure (Khesht-Masjedi et al., 2019).

Furthermore, according to Cohen (2013), parents are placing themselves and their kids in circumstances that exacerbate anxiety. Parents want their children to excel intellectually, to be consistently joyful, creative, and to develop strong social and emotional intelligence. However, given how demanding this request is, anxiety and exhaustion are unavoidable consequences. From a variety of theoretical angles, one may argue that anxiety makes it more difficult to concentrate and learn.

Theoretical background

Expression of anxiety.

Anxiety is characterised by trepidation, fear, worry, or fear. Some of those emotions, such as concern for a loved one, a test, or an exam, may be justified in some cases. Anxiety disorders make it difficult for the person to sleep or perform other tasks (Khesht-Masjedi et al., 2019). Although stress is a significant contributing factor, other factors can lead to panic attacks, phobias, or obsessions (Bourne, 2012). People can experience physiological, behavioural, and psychological effects from anxiety (Bourne, 2012, 20). Junttila (2016, 76) states that there are three main ways that social anxiety presents itself: psychological, or thoughts and feelings; physiological, or autonomic nervous system; and behavioural. Adolescents' irritability can also be a sign of several mental issues, such as anxiousness (Khesht-Masjedi et al., 2019). Various forms and degrees of anxiety might emerge. The intensity of the condition might vary, ranging from a mild anxiety attack to a severe panic attack characterised by palpitations, disorientation, or severe dread (Bourne, 2012, 20).

A panic attack is characterised by an abrupt rise in anxiety or discomfort that can reach its peak in a matter of minutes. It can also cause symptoms

including palpitations, sweating, nausea, dizziness, and chest pain (Moran, 2016, 28). Anxiety may constitute an anxiety disorder if it is more severe (e.g., panic attacks occur), lasts for several months or longer, or results in phobias that significantly impact daily living (Bourne, 2012, 21).

Generalised anxiety disorder (GAD) is defined as chronic anxiety that lasts at least six months and is not accompanied by panic attacks, phobias, or obsessions (Bourne 2012). A child with GAD may carry security items such as medication, food, and phone numbers, or require someone to accompany him or her just in case (Galanti, 2021, 123). In addition to a generalised anxiety disorder with difficult-to-control worrying, there may be restlessness, internal tensions, muscle tension, easy fatigue, difficulties concentrating, impatience, and sleep disruptions. Symptoms may also include elevated blood pressure, gastrointestinal irritation, and insomnia (Bourne, 2012, 35).

One of the most prevalent anxiety disorders is social anxiety disorder (SAD), which frequently manifests in adolescents between the ages of 8 and 15. Social anxiety disorder is characterised by feelings of fear, shame, or embarrassment in situations where others are observing or where one must perform in front of others.

In conclusion, anxiety can alter a person's physiological, behavioural, and psychological states. Anxiety can manifest in a multitude of forms and levels of intensity, ranging from a basic anxiety attack to a panic attack.

Mental health in adolescents.

Anxiety disorders are the most common childhood mental health problem. It includes a range of fears, including phobias such as fear of the dark or heights (Junttila, 2016).

Adolescence is a dynamic period that sets the physical, mental and economic foundations for adulthood. It is a period of heightened stress

involving complex neurological changes in social interaction, emotions, and risk processing, which in turn are influenced by peers and social pressures. During this time, mental health problems affect up to 20% of adolescents (Itani et al., 2021, 1). Although anxiety can be considered a normal part of childhood and adolescence, it becomes a disorder when it starts to interfere with daily activities, such as going to school or interacting with others (Moran, 2016).

According to Junttila (2016), the most widespread is social anxiety or the fear of social situations. Given the gender-specific stresses associated with females, such as body dissatisfaction, gender role restriction, and unwelcome sexual attention, puberty may be a sensitive phase for the development of social anxiety symptoms (Nolen-Hoeksema & Girgus 1994, quoted in Deardorff et al., 2007).

Adolescents often lack the coping mechanisms to manage their stress and anxiety. For instance, children between the ages of 11 and 12 exhibit negative and unhappy emotions, whereas children between the ages of 13 and 14 get agitated and 15-year-olds behave withdrawn.

Teenage years are always linked to anxiety, even though symptoms of anxiety differ amongst teenagers (Khesht-Masjedi et al., 2019). Junttila (2016) argues that, while minor nervousness is a common phenomenon, anxiety hinders successful performance.

In conclusion, the most common mental health issue affecting children is anxiety disorders. While anxiety is a common aspect of adolescence, it turns into a medical disorder when it starts to interfere with a student's day-to-day activities. Anxiety is always linked to adolescence, yet each student's experience of anxiety is unique. It should be noted that educators are equally worried about the mental health of their students. Early identification and help for young people with mental health problems is essential.

Anxiety and how it manifests itself in school work.

Researchers have shown that anxiety disorder has a major impact on academic performance (Khesht-Masjedi et al., 2019). Alesi et al. (2014) discovered that depression in students with age-appropriate development was substantially related to academic performance. The authors also identified a significant negative correlation between school anxiety and self-esteem in students with age-appropriate development and those with learning impairments. In her study, Maria Stepanova (2021) found that students with learning disabilities have an elevated sense of inadequacy. Students feel that they are unable to cope with their studies. Furthermore, the author discovered that students with learning disabilities face significant stress as a result of their coursework. Because learning activities play such an important role during the school years, fear of school and fatigue develop before the adolescent years (Alesi et al., 2014). Children with learning difficulties may suffer more from school fatigue than children of age-appropriate development, for example, cases of learning difficulties may go undetected and teachers may not immediately recognise learning difficulties (Stepanova, 2021). Inappropriate approaches and teaching styles can make students feel inadequate and worry about their academic performance at school (Mammarella et al., 2016). Children also vary greatly in their natural anxiety, with some children's hearts racing at the mere thought of answering in front of the class, while others enjoy being the centre of attention (Kikas, 2010).

Teachers might observe an inability to relax, difficulties concentrating, and avoidant behaviour in this anxiety disorder (Moran, 2016). In the first few years of school, children may experience other school-related anxieties that affect their learning and coping. Often these are related to separation from parents (especially for children who have been at home before school), the school journey,

the identity of the teacher and making friends. Such fears are usually a concern at the very beginning of schooling and quickly disappear in a safe and supportive classroom environment (Kikas, 2010).

It can be argued that anxiety disorders have a significant impact on academic achievement. Students who suffer from anxiety feel they are unable to cope with their studies. Students with learning disabilities experience more school fatigue than students with age-appropriate development. Anxiety can diminish motivation, attention, and concentration, resulting in academic failure. If naturally nervous students feel confident and know that nothing will happen if they get an answer wrong, they may not experience severe anxiety in a specific achievement situation. Anxiety at an excessive level will affect academic performance.

Supporting an anxious student in the classroom.

In their works, Khesht-Masjedi et al. (2019), Kikas (2010), Mező (2024), Moran (2016), and Reeve (2006) all provide advice for what teachers could be doing in the classroom to help kids with anxiety. For children, it is vital to provide a safe learning atmosphere in which making mistakes is a natural part of the learning process, asking for help is acceptable, and where the educator can reduce situations that generate anxiety in youths. This way the teacher can assist kids with higher anxiety in achieving results that correspond to their true abilities and skills (Kikas, 2010), and by teaching several learning methods, it is possible to help relieve anxiety (more: Mező and Mező, 2014, Mező, 2024).

Students are supported by a regular routine and clear expectations. The timetable should be visible to everyone in the classroom, and it is crucial to alert students of changes to the schedule early (Moran, 2016).

Students with anxiety disorders can often be late for school or absent from school altogether. Going to school can be a significant accomplishment for anxious children. It is critical to encourage and urge these adolescents to go to school (Moran, 2016).

To reduce children's anxiety, the focus should be on tasks rather than on students' abilities. The classroom should provide variety in learning, challenge students and help set personal goals, ultimately reducing competition between students and creating a more supportive and respectful classroom environment. For example, students may be allowed to work in groups rather than individually, as students are less likely to volunteer their responses when working individually (Moran, 2016).

An anxious student is advised to sit close to the door so that he or she can easily exit the classroom if necessary and does not have to bring too much attention to themselves by exiting (Moran, 2016). Giving the child a permission slip allows the student to leave the classroom when symptoms of anxiety occur, without causing unwanted distraction. This permission allows the student to leave the classroom for 5 to 10 minutes in a safe place with a person so that he or she can calmly recover from the anxiety. The room and the person should be thought through beforehand, and it should be agreed whether this is the office of a school counsellor, a nurse, a trainer or a special needs teacher. It will also give the student access to a toilet and water if necessary. It is also worth mentioning that teaching elementary anti-anxiety methods can also be helpful for anxious children (e.g. breath control, redirection, desensitisation, etc. - Mező, 2024)

In conclusion, anxiety might make it harder for students to demonstrate their true abilities. Anxious students are more likely to arrive late or miss school entirely. Teachers and parents alike frequently underestimate and overlook the children's fears and anxieties. Anxiety may not be a

single trait; thus teachers should be aware of the potential symptoms of an anxiety disorder. Additionally, more anxious students tend to lose motivation and interest faster. Anxious students may give teachers the impression that they are unfocused, unmotivated, or disrespectful. Positive teacher-student connections can help to alleviate student anxiety in achievement situations.

Research methods

Research questions and objectives

This research aimed to find out in what way anxiety is expressed at school, how anxiety affects educational activities and what kind of support to offer to students with anxiety. The following research questions guided this study:

1. How is anxiety expressed among 13-14-year-old students when in school?
2. How does anxiety affect the 13-14-year-old students' educational activities?
3. What kind of support should be provided to students with anxiety at school?

Sample size

The sample was based on adolescents between the ages of 13 and 14, to use purposeful sampling. It was anticipated that approximately 100 consents would be received from one specific school, given its size and the greater number of 13–14-year-olds than the predicted sample. However, only one parent's consent was obtained. Consequently, an invitation to join and a consent form were sent to various schools in Estonia. However, two respondents were not between the ages of 13 and 14, and two other responses were incorrect, preventing us from using them. Consequently, the remaining 26 students were included in the data analysis. The sample consists of 12 young men and 14 young women.

The interview candidates were selected based on the responses to the questionnaires completed by the students. The initial intention was to interview the most anxious students. However, they either did not respond to the email or declined to be interviewed due to feelings of anxiety. In total, eight interviews were conducted: six of which were oral via the Zoom platform, and two students expressed a desire to substitute the oral interview with a written one due to anxiety.

Method

Qualitative and quantitative research methods were employed in this study. The combined method of research has become an increasingly accepted and utilised approach to conducting social research (Bryman, 2012). Data were collected through the use of a structured questionnaire and semi-structured interviews, which were conducted by a thematic interview guide. The questionnaire consisted of 41 questions, of which 39 were multiple-choice and two were open-ended. The use of closed questions allows for the collection of data contingent on the responses provided, which may result in the omission of crucial aspects of the phenomenon under study. Conversely, open-ended questions facilitate a more comprehensive range of responses, necessitating the systematisation and aggregation of these responses, which in turn increases the complexity and time required for processing and analysis (Õunapuu, 2014).

The questionnaire was divided into four sections: expression of anxiety (five questions), anxiety related to learning (21 questions), need for support (four questions), and learning challenges (11 questions, two of which were open-ended).

Interviews are one of the most commonly used data collection methods in qualitative research (Õunapuu, 2014). In our study, we employed a semi-structured interview, during which the interviewer is aware of the sub-topics, but the questions

and their order are flexible. During the semi-structured interview, it becomes evident what relevant data will emerge and how it may be used in the research. Thus, the interview begins systematically, progressing openly and depending on the scenario. Six students participated in the semi-structured interview, while two students responded to the interview in writing due to anxiety. Those who participated in the written interview were sent 16 questions to answer.

Investigation procedure

A random sample of 26 schools was approached and asked to provide parents with consent forms to take part in the survey. Participation in the survey was voluntary and anonymous. Sixty-two parents gave their consent to answer the questionnaire and participate in the interview. Three parents gave consent to complete the questionnaire but not to participate in the interview. For ethical reasons, students were not asked to indicate on the questionnaire which school they attended.

Two days before the interview, eight questions were forwarded to the participants to assist them in preparation. Additionally, permission was requested to record the interviews, which was granted by all interviewees. The interviews were conducted between February and March 2022. The oral interviews were conducted via Zoom.

Data analysis

The questionnaire responses were evaluated both individually and as a whole. Due to the limited sample size, it was not feasible to express the responses as percentages; instead, a count of respondents was used. Excel was employed to analyse correlations to identify relationships between anxiety and several different attributes (high, medium, weak, or no association).

Thematic content analysis was used to analyse the interviews and free responses. The advantage

of thematic content analysis is that it is flexible relatively straightforward and quick to use. It is possible for insights to emerge during the data analysis process that were not anticipated at the outset. The data can be interpreted in a social and psychological context (Braun & Clarke, 2006). The textual data for our research are drawn from interviews and questionnaire responses.

To transcribe the interviews, we used online speech recognition. The interviews are coded according to the order in which the students were interviewed. Eight students participated in the interview and the respondents are coded A1, A2, ..., A8. The quotations of the respondents are presented in italics.

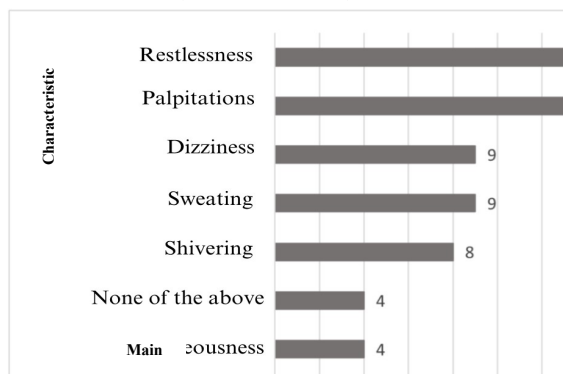
Results

Expression of anxiety

The relationship between gender and anxiety was examined, with no association found ($r=0.000\dots$). Students rated their anxiety levels at school on a scale of 1 to 4. Of the respondents, 12 reported feeling anxious often, 12 reported feeling anxious rarely, one reported feeling anxious all the time, and one reported feeling no anxiety at all.

Students were asked to rate on a scale of 1 to 5 the characteristics that characterise them, with a choice of several answer options. The results indicated that 11 students feel anxious when they go to school, six students feel anxious when talking to their classmates, 11 respondents feel anxious when they have to talk to the teacher, and 17 students feel anxious when the teacher talks to them in class and they have to answer. Twenty-two respondents indicated that they experience anxiety when undertaking assessed work. To ascertain the specific characteristics that elicit this anxiety, students were invited to select the options that best reflected their experiences. The respondents were presented with a list of eight different characteristics, which can be seen in Figure 1.

Figure 1. Characteristics associated with anxiety (n=26).
Source: Tammemäe, Allmäe & Sild, 2024.



The manifestation of anxiety is individual, as evidenced by the students' self-report. In the interviews, students reported that they experience physical symptoms such as sweating, trembling, difficulty concentrating, and a sense of inability to maintain a steady state. A7: *Discomfort, nervousness, sweating, hands, and feet shaking, inability to concentrate, heart beating faster and breathing faster.* A8: *My anxiety is even when I have to talk to a stranger, even a salesperson in a shop.*

The survey revealed that a significant proportion of students drop out of school because of anxiety. Seven students reported that they frequently feel a lack of motivation to attend school or engage with their lessons due to anxiety, while three students indicated that they experience this feeling consistently. In the interview, we inquired about instances where students had been absent from school due to anxiety. A8: *I have missed school because my heart is pounding and my stomach hurts. Even before some big test.* A4: *Yes, when we had to do a presentation in history once, I was absent from school that day so I wouldn't have to do it in front of the class, so I did it afterwards separately for the teacher.* A6: *I once didn't go to school for a whole week because I didn't feel like I could, yeah, I was home for a whole week.*

Students rated their level of anxiety, which demonstrated that over half of the respondents still experience anxiety frequently and occasionally,

with only eight respondents indicating that they rarely feel anxious. This was also evident from the interviews, where students stated that they felt anxious, either during some lessons or, for example, before a test or presentation.

Figure 1 illustrates that anxiety manifests itself in different ways in students, which is corroborated by students' statements in the interviews.

Anxiety in relation to learning.

The students who participated in the survey evaluated their academic performance. Of the respondents, 13 indicated that they believed their academic performance could be improved, while 12 rated their performance as satisfactory. One student reported that their academic performance was unsatisfactory. None of the students surveyed rated their academic performance as excellent.

The relationship between anxiety and academic performance was investigated, revealing a medium-strength relationship ($r=0.588$) between the two traits. Sixteen students claimed to have learning difficulties. The relationship between anxiety and students' self-assessment of whether their academic performance would be better without anxiety was investigated, resulting in a medium-strength association ($r=0.369$) between these two characteristics. A1: *My grades have gotten worse because of anxiety.* A6: *Well, my grades have gotten very bad at the moment, but I am trying to improve them now.* A4: *We had to do a presentation on history and then because of anxiety I forgot things and I didn't dare to speak and then the teacher took the mark down.*

Students were required to rate on a scale of 1-4 whether their attention is distracted by anxiety at school. One student indicated that they experience this distraction constantly, six students indicated that they experience it frequently, nine students indicated that they experience it rarely, and 10 students indicated that they do not experience this distraction at school due to anxiety. We found a medium-strength association between these charac-

teristics ($r=0.623$). In the interview, we asked students to identify the factors that cause their distraction in the classroom. A4: *Sometimes I just get lost in thought and then lose focus.* A8: *Boredom, because the constant talking tires me and it's not interesting. Sitting still isn't my thing, sometimes the teacher makes us stand, but that's nonsense too.* A2: *Being uninterested or tired of the subject, lack of motivation.*

We asked students if they felt their memory was disturbed by anxiety at school. Of the respondents, 13 indicated that they frequently experienced this phenomenon, 10 stated that they did not, and three reported that it occurred rarely. The results indicated a moderate correlation between memory and anxiety ($r = 0.616$). A8: *If I could draw the subjects, I would remember them better, but it is forbidden.* A5: *Maybe in the tests it could happen, for example, I don't know, maybe I forget things.*

In the questionnaire, students rated on a scale of 1 to 4 whether they felt their thinking was disturbed by anxiety at school. Two respondents indicated that they felt this way all the time, nine indicated that they felt this way often, six indicated that they felt this way rarely, and nine indicated that they did not feel this way. The interviews revealed that students felt anxious when they had to answer questions in front of the class or orally. Students indicated that if they could not answer or understand, they did not dare to ask for help. A4: *I have a girl in my class who has like really crazy anxiety. Some teachers like to make her perform in front of the class all the time. She started crying once, in front of the class, so she shouldn't be forced.* A8: *I'm afraid to answer loudly in class and I'm very anxious when there's an exam or a test. Just hearing about it makes me very nervous. I want to run away, I don't want to go to school, etc.*

The analysis revealed a medium-strength association ($r=0.642$) between anxiety and being in front of the class. Two students indicated that they do

not experience anxiety when performing in front of the class. Eight students reported experiencing anxiety rarely, four students reported experiencing anxiety often, and 12 students reported experiencing anxiety all the time when performing in front of the class. The students were asked to indicate whether distance learning tends to increase or decrease their anxiety about their studies. 24 students answered that it tends to decrease their anxiety, while two answered that it tends to increase their anxiety. The relationship between anxiety related to distance learning and active communication in online lessons was investigated. A strong correlation was found between the two characteristics ($r=0.673$). Five students stated that taking part in and actively interacting with an online class increases their anxiety. 21 students indicated that participation in an online class tends to reduce their anxiety. A2: *The positive thing is that you can choose when to do things and there are fewer things to do in general, but the negative thing is that you have to do them by yourself and you have to force yourself to do them.* A5: *The negative was that I couldn't be in school very much.* A4: *Distance learning is better, because then I like, if we have to do a presentation for example, I don't have to be in front of the class, at home nobody is watching me.* A6: *Well, the positive thing is that I can be at home. The negative is that everyone is sitting at home. Otherwise, yes, I like being at home, but I would still like to go to school because I wouldn't learn anything at home.*

In addition, students pointed out that the negative aspects of distance learning were not being able to meet their friends, the difficulty of understanding subjects and the many distractions at home. The positive aspects mentioned by students were that they could sleep longer during distance learning and that they did not have to turn on cameras.

We found that there was no correlation between

anxiety and distance learning ($r=-0.284$). Two students said that distance learning tends to increase their anxiety while studying and 24 respondents said that distance learning tends to decrease their anxiety while studying. We asked students whether their anxiety increased when other students looked at them (Figure 2). A4: *I feel anxious when people look at me and when I am asked a question. Sometimes also during a test.*

Figure 2. Students' ratings of anxiety when looked at by fellow students ($n=26$). Source: Tammemäe, Allmäe & Sild, 2024.

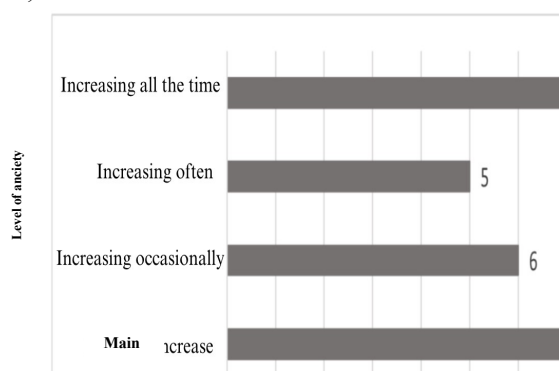
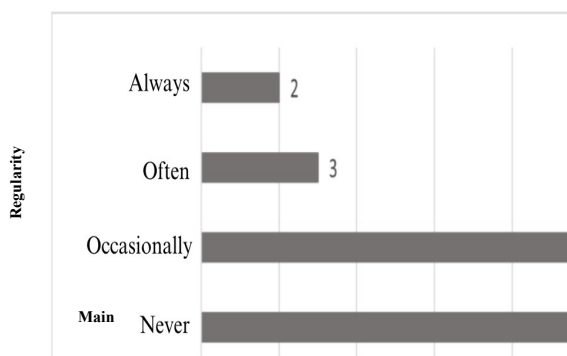


Figure 3 illustrates the ratings of non-response in class provided by students. The analysis indicates that there is a medium-strength association ($r=0.509$) between anxiety and class non-response (Appendix 3).

Figure 3. Anxiety and not responding in class ($n=26$). Source: Tammemäe, Allmäe & Sild, 2024.

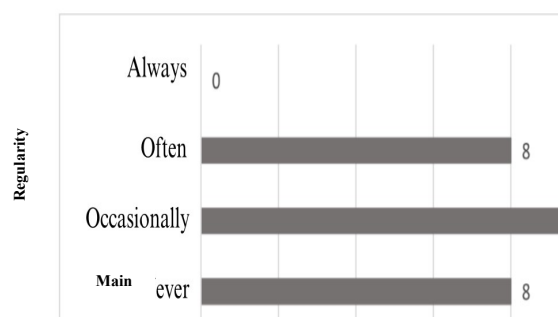


We class students to rate on a scale of 1 to 4 whether they have any anxious thoughts during learning activities. 13 students answered that they tend not to. Seven said that they often do. Five respondents said that they do not have any anxiety and one student said that they have constant anxiety. A1: *Didn't feel anxious, but like these thoughts just wouldn't let me sleep, which they were.* There is a medium-strength association between anxiety and worrying ($r=0.472$).

We looked at whether anxiety interferes with students' ability to concentrate - for three it interferes all the time, five often, 13 sometimes and five never. A1: *I didn't study for a long time; I didn't participate in class because I just couldn't concentrate.*

We investigated the association between anxiety and non-participation in school, finding a medium-strength association ($r=0.617$). Figure 4 shows students' ratings of their anxiety and their class participation. None of the respondents indicated that they would leave things unsaid, unanswered, or not done in class all the time because of anxiety. A7: *Yes, I have missed classes or tests. A1: You have to do the work anyway, but it's best if you're there and don't do anything. When I start to study, I get more anxious.*

Figure 4. Non-participation due to anxiety in class ($n=26$). Source: Tammemäe, Allmäe & Sild, 2024.

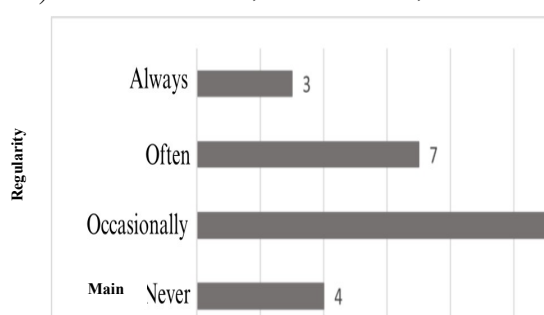


We asked students to rate whether they believed their academic performance would improve if they did not experience heightened anxiety. Two respondents claimed they would certainly be better,

nine said they would be slightly better, and six said they would not be better.

Figure 5 shows students' responses to the question of whether they avoid anxiety-provoking situations in class. Three students said that they avoid it all the time, and seven students said that they often avoid situations that cause anxiety in class.

Figure 5. Avoiding anxiety-provoking situations in school ($n=26$). Source: Tammemäe, Allmäe & Sild, 2024.



The students themselves reported that they would perform better if they did not experience anxiety. Our findings indicate a moderate correlation between anxiety and academic performance ($r = 0.588$). Additionally, 16 out of 26 respondents have learning difficulties. Furthermore, our results demonstrate a moderate correlation between anxiety and attention ($r = 0.623$) and a moderate correlation between anxiety and memory ($r = 0.616$). Students report feeling anxious when they have to answer in front of the class or orally. It can be argued that distance learning has reduced students' anxiety in class. In the case of distance learning, students mostly cited difficulties in understanding the topics and a lack of sufficient interaction with friends. On the positive side, the fact that they are not seen by their classmates and do not have to answer questions in front of the class was mentioned.

Supporting a student with anxiety

We asked students if they had ever sought professional help for anxiety. 21 students said they had not and five said they had. Most of the interviewees said that they did not want to or did not dare to see a school psychologist. A1 further described: *It was very difficult to be at school and like things were very difficult and other things were also quite bad, with family and friends and at school. The class teacher noticed this and referred me to a psychologist. It was good that I could talk to a psychologist, it was much better afterwards.* However, A6 said that going to a school psychologist was not for them, because talking about the problem could risk confidentiality. A6: *And then I don't want the whole school to know and sometimes could be taken out of class to talk about these things.*

Interviews revealed that students tend to confide in very few friends about their anxiety. It appeared that they would rather discuss their anxiety with friends who are also experiencing it than with other adults who may not fully comprehend their experiences. A6: *Well, I have a friend with whom I talk about it. Like whom we talk to because others don't seem to have it and then like we don't want to talk to them because their lives are different than ours. My mom doesn't think I have an anxiety disorder, she just thinks I have that teenage look. Like I had a cold and a cough at the same time and then they looked for another excuse not to say that's why. They always look for other reasons and try not to think about such things.*

Of the eight interviewees, three students stated emphatically that they did not want the teacher to know that they were experiencing anxiety in the classroom. In the questionnaire, we asked them to share their views on what they would like teachers to know about student anxiety. One respondent wrote: *Sometimes I feel uncomfortable being in front of the class (I have a hard time seeing sometimes even with my glasses on, I also sometimes get very hot in the head and feel heavy in the head).* In addition, one student replied: *Teachers could know more about ADHD and dysgraphia.*

It was also stated that: *I don't like to answer in front of the class.* In the questionnaire, the students also asked what they thought teachers could do differently:

- *To have them present to the class less frequently.*
- *Ask students if they want to answer something in front of the whole class.*
- *To understand when a student has problems and is afraid to tell others about them.*
- *Question all 35 students in turn, not just a few specific ones with lower grades.*
- *There could be a nature corner at school with fish, plants, etc. It would be a good place to relax.*
- *Not to scream so much!*
- *Less worksheets.*
- *Answering from my seat.*

A4: *To have a teacher come and comfort you and say it's not that bad and that nobody really cares.* A6: *I don't think there's much the teacher can do. Adults say that everyone has been through it and that it's not a bad thing, but it's like they don't really seem to understand how others feel.*

We also asked interviewees to describe their ideal classroom and where they would like to sit in it. A1, A2, and A4 described that they would like to sit at the back of the classroom. A8: *There could be green plants in the classroom, sunlight, and comfortable chairs. Windows and doors are ok but too much stuff in the classroom is distracting,* A2: *I like to look out of the window but for some reason, I am usually by the door all the time in the classroom.*

We asked students what ways they use to cope with their anxiety. A1: *I used nicotine for a long time when I had anxiety disorders. Then I wasn't so anxious, like I can't explain, it kind of took my mind elsewhere and stuff. During breaks, we went on smoke breaks with friends, and during classes, I used nicotine pads.* A3: *Well, I start thinking about other things. I don't know, I'm thinking about my great-grandmother who I haven't seen for a long time. It calms me down; my breathing gets slower then too. It's like it helps me to think about a dear person.*

Each student has his or her way of coping with anxiety, for example, A4 will play with his or her jewellery or sweatshirt laces. In addition, A5 pointed out that she breathes in and out calmly and reassures herself that everything is fine. A2: *I'll draw in a notebook somewhere. Or I go to the toilet to calm down.* A8 would ask the teacher for permission to go to another room to calm down. A8: *And if I need to go to calm down, I'll say I need to go and I'll be allowed, even 5 minutes would save the day.*

In addition, we asked students how they would support fellow students if they saw them feeling anxious. A8: *I say everything will be fine and my friends think of me as their therapist.* A3, A4, A6, A7 would try to comfort the anxious student and talk to them calmly, reassuring them that everything will be OK. A1: *I don't know if I should let them be alone so they can think and calm down or rather involve them, for example, if we go to play basketball, to invite them too.* A2: *I would ask if I can help and if they want to be alone or if they want to talk.*

The responses of the students indicated that they do not seek the assistance of a specialist at school due to a lack of confidence in adult support. Additionally, some respondents expressed uncertainty regarding the presence of professionals at school who could assist. Adolescents tend to discuss their anxiety with their friends who are experiencing similar difficulties. Our findings revealed a strong correlation between anxiety and problematic anxiety ($r = 0.744$). In their responses, students indicated that teachers should question all students with equal frequency. Furthermore, one respondent stated that even a brief period of solitude within the school environment would be beneficial.

Discussion

The survey results indicated that students experience anxiety at school. They experience anxiety at school, either often or sometimes. Bourne (2012) notes that anxiety can manifest itself

in a variety of forms with different degrees of intensity. Additionally, the author describes various symptoms of anxiety, including breathlessness, palpitations, shivering, sweating, nausea or an uncomfortable feeling in the stomach, numbness, dizziness or a feeling of insecurity. These symptoms were also described by the students, both in the questionnaire and during the interview. It can be assumed that all symptoms do not have to co-occur, but are individual for each student. In their studies, Deardorff et al. (2007) and Khesht-Masjedi et al. (2019) found that girls feel more anxiety than boys. Our study showed that there is no relationship between gender and anxiety.

The interviews revealed that students feel that adults do not understand them. According to the students, adults believe that anxiety is a normal part of adolescence and will resolve itself. Research indicates that both teachers and parents tend to underestimate students' fears and anxiety and fail to recognize them (Kikas, 2010). Junttila (2016) argues that adverse developments may already lead to a more serious diagnosis, such as social phobia. Social phobias may manifest in late childhood or adolescence and, if left untreated, may persist throughout adolescence and early adulthood (Bourne, 2012). Research has indicated that some students experience anxiety already on their way to school. The majority of the students in the study reported feeling afraid to perform in front of the class, with a significant number of them missing school or lessons as a result. They also reported feeling anxious when talking to classmates or teachers. In addition, they also reported feeling anxious when doing assessed work. It can be argued that social phobia is present in schools. Bourne (2012) has identified three key areas of concern: a fear of being in a public place, a fear of being watched and a fear of taking exams. Fear of being silly or boring in front of others can lead to avoidance of social interaction or situations where one might be under supervision (Galanti, 2021).

Interviews revealed that one student goes to the toilet when anxious at school, but stated that anxiety is not a problem for them. It can be concluded that students believe that they must cope with their anxiety independently, as many young people and adults lack a general understanding of the nature of anxiety. One student openly admitted in the interview that they had started using nicotine at the most anxious time. The students described going outside to smoke with their friends during break times and also using nicotine patches during lessons to reduce anxiety. It is important to note that nicotine use also decreased during less anxious times and that people were more likely to go out with friends to play basketball during breaks.

One of the objectives of this study was to investigate the relationship between anxiety and academic performance. Our findings indicate a strong correlation between anxiety and problematic anxiety as rated by the students themselves ($r=0.744$). In the survey, students were asked to rate their academic performance, and the results indicated that they believe their academic performance could be better. The students' responses demonstrated that anxiety has caused their grades to decline. However, the study revealed that there is no correlation between anxiety and learning difficulties.

Interviews revealed that students experience anxiety when they are required to answer questions in front of the class or orally. Additionally, students indicated that they are hesitant to seek clarification from the teacher if they do not comprehend the task. A child who is confident in their ability to do well on a task feels secure and knows that nothing will happen even if they get the wrong answer may not experience significant anxiety in a particular performance situation (Kikas, 2010).

The majority of students claimed that distance learning reduces their anxiety. There was a strong correlation between distance learning and being

active in an on-line class ($r=0.673$). For instance, in the interviews, students indicated that they derived enjoyment from participating in the online class when they were not required to activate the camera. Additionally, students' responses demonstrated that they felt secure in their homes because they were not compelled to respond in front of the class. Lillepea and Saaremäe's (2021) study also indicated that distance learning was suitable for those who experienced discomfort learning in a large group and were distracted by social interaction with fellow students. Conversely, the students in the interviews highlighted the negative aspect of being unable to meet their peers at school.

The findings of our research indicated that there is no correlation between anxiety and learning difficulties. The authors have reached a similar conclusion in other studies. For example, Khesht-Masjedi et al. (2019) found a strong negative correlation between academic achievement and anxiety and depression.

Another objective of this study was to figure out what sort of assistance could be offered to students with anxiety at schools. The findings of the survey indicated that students do not seek the services of a specialist due to anxiety. Instead, they prefer to consult with their friends who are also grappling with anxiety, rather than other adults who may not fully comprehend their condition.

The interviews revealed that there is a risk of breaching confidentiality when consulting a school psychologist. This underscores the crucial role that adults play in creating a supportive and safe psychosocial environment for students. This implies the creation of a welcoming and secure environment for students, in collaboration with relevant stakeholders (Ministry of Social Affairs, 2020). Additionally, some respondents were uncertain about the availability of support personnel at their educational institutions.

Both in the questionnaire and in the interview, it emerged that students need time alone at school at certain times. The response showed that even five minutes of alone time would help students to cope with anxiety. Moran (2016) also recommends that students should be allowed to leave the classroom when they feel anxious.

Allowing the student to leave the classroom for 5 to 10 minutes to go to a safe place allows the student to recover from anxiety in a calm environment, including using the toilet and drinking water. Students said that they feel anxious when they get a negative grade in school. It was pointed out that the assessment of students should not always be a graded assignment, but that other forms of assessment could be used. To reduce students' anxiety, the focus could be on the tasks rather than their abilities (Moran, 2016). Students indicated in their responses that they would bring a pet to school to reduce anxiety. Also, students felt that there could be a natural corner at school where they could sit quietly and be alone.

Students stated that having too many things in the classroom is distracting. In addition, it is important for students that teachers ask different students to answer questions at equal intervals. Participants also claimed that it would reduce their anxiety when answering questions if the teacher supported them with guiding questions and, above all, understood that the students had forgotten what they had learnt. More anxious students tend to lose track of the task and, consequently, their motivation and interest more quickly. Often these students can give adults the impression that they are inattentive, unmotivated and disruptive (Kikas, 2010).

Moran (2016) recommends that teachers ensure that students have the option of sitting near the door so that they can exit the classroom quickly if necessary. In interviews with students, we explored how their seating position in the classroom affects

their learning and anxiety. All students stated that the seating is important for them and that it is important that the teacher is not too close to them. Students prefer to sit at the back of the class rather than in the middle.

The results of our survey indicate that schools and teachers should implement the following recommendations to support students with anxiety:

1. Raise teacher and student awareness of anxiety symptoms and causes. For example, a special needs instructor can explain how worry affects learning.
2. It is critical to detect indicators of anxiety early on, to determine what is causing worry in students, and to involve other specialists as needed.
3. Create a safe learning atmosphere in which making mistakes is a normal part of the learning process and seeking assistance from the teacher is acceptable.
4. Students with anxiety should be able to select the ideal seat for them, as this helps them commit to their learning.
5. Create an environment in the classroom that promotes autonomy. Teachers, for example, might support their students' psychological needs and interests by encouraging and explaining the significance of the learning activities they give.
6. Teachers should diversify their teaching by discovering new ways to test students' knowledge and questioning them at regular intervals throughout class.
7. Follow the norms of ethics and confidentiality at school.
8. Introduce students to professionals in the school who can offer support to anxious students if needed. Provide students with information on where the support specialists' offices are located, when they are available and what questions they can be contacted about.
9. Create a peaceful and comfortable space for students to be alone at school. Anxious kids require a space where they can relax or be alone. This room or location should be discussed with the students in advance.

Limitations

The limitations of the survey include a small sample size and low response rates from schools. Future studies could be expanded to include a broader target group, such as students aged 13 to 18, and parents and teachers of these students could be interviewed. Subsequent research could also include students whose anxiety interferes with their daily lives.

References

- Alesi, M., Rappo, G., & Pepi, A. (2014). Depression, Anxiety at School, and Self-Esteem in Children with Learning Disabilities. *Journal of Psychological Abnormalities in Children*, 3(3), 1-8. DOI: <https://doi.org/10.4172/2329-9525.1000125>
- Bourne, E. J. (2012). *Ärevushäirete ja foobiaste käsiraamat*. Tallinn: Pegasus. /in Estonian/
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101, DOI: <https://doi.org/10.1191/1478088706qp063oa>
- Bryman, A. (2012). *Social Research Methods*. New York: Oxford University Press.
- Cohen, L. J. (2013, September 26). *The drama of the anxious child*. <https://ideas.time.com/2013/09/26/the-drama-of-the-anxious-child/>
- Deardorff, 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, 102–104.
- Galanti, R. (2021). *Kuidas ärevusega toime tulla. Abiks noortele*. Ühinenud ajakirjad /in Estonian/

- Itani, M. H., Eltannir, E., Tinawi, H., Daher, D., Eltannir, A., & Moukarzel, A.A. (2021). Severe Social Anxiety Among Adolescents During COVID-19 Lockdown *Journal of Patient Experience* 8: 1–10.
DOI: <https://doi.org/10.1177/23743735211038386>
- Junttila, N. (2016). *Sõpradeta elu. Laste ja noorte üksildus*. Koolibri /in Estonian/
- Khesht-Masjedi, M. F., Shokrgozar, S, Abdollahi, E, Habibi, B, Asghari, T, Ofoghi, R.S., & Pazhooman, S. (2019) The relationship between gender, age, anxiety, depression, and academic achievement among teenagers *Journal of Family Medicine and Primary Care, Published by Wolters Kluwer - Medknow*. 8:799-804.
DOI: https://doi.org/10.4103/jfmpc.jfmpc_103_18%20
- Kikas, E. (2010). *Õppimine ja õpetamine esimeses ja teises kooliastmes*. Tartu : Haridus- ja eadusministeerium. /in Estonian/
- Lillepea, M. & Saaremägi, K. (2021). Üldhariduskoolide tugispetsialiste koostöö õpetajate, lapsevanemate ja teiste tugispetsialistidega distant-sõppe perioodil [Magistritöö, Tallinna Ülikool]. <https://www.etera.ee/s/LJKcMR1enQ>
- Mammarella, I. C., Ghisi, M., Bomba, M., Bottesi, G., Caviola, S., Broggi, F., & Nacinovich, R. (2016). Anxiety and Depression in Children With Nonverbal Learning Disabilities, Reading Disabilities, or Typical Development. *Journal of Learning Disabilities*, 49(2), 130–139.
DOI: <https://doi.org/10.1177/0022219414529336>
- Mező, K., & Mező, F. (2014). The IPOO-model of creative learning and the students' information processing characteristics. *Horizons of Psychology*, 23, 136–144. DOI: <https://doi.org/10.20419/2014.23.414>
- Mező F.(2024). *Tanulás: diagnosztika és fejlesztés az OxIPO-modell alapján*. [Learning: diagnostics and development based on the OxIPO model.] Debrecen, K+F Stúdió Kft. ISBN: 978-615-81707-9-6
- Moran, K. (2016). Anxiety in the classroom: Implications for middle school teachers. *Middle School Journal*, 47:1, 27-32.
DOI: <https://doi.org/10.1080/00940771.2016.1059727>
- Reeve, J. (2006) Teachers as Facilitators: What Autonomy-Supportive Teachers Do and Why Their Students Benefit. *The Elementary School Journal*. 106 (3.).The University of Chicago.
- Sotsiaalministeerium. (2020). *Vaimse tervise robeline raamat*. Tallinn. /in Estonian/
- Stepanova, M. (2021). *Õpiraskustega õpilaste kooliga seotud läbipõlemine* [Magistritöö, Tallinna Ülikool]. <https://www.etera.ee/s/e6zjbGmV6b> /in Estonian/
- Õunapuu, L. (2014). Kvalitatiivne ja kvantitatiivne uurimisviis sotsiaalteadustes. Tartu Ülikool. /in Estonian/