



EXAMINING THE MATH ANXIETY LEVELS OF UNIVERSITY STUDENTS DURING COVID-19

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Abstract:

Emotional reactions such as stress, anxiety, and fear from social relations of individuals to communication skills; can have negative effects on many situations from learning situations to success in school and business life. Educational processes related to mathematical skills that develop analytical thinking are also affected by these emotional reactions. In the literature part of the study, the subjects of anxiety and fear, which are important in shaping the students' orientation to mathematics, are mentioned. Within the confines of the study, scores on math anxiety among university students were broken down by gender, grade level, and department, and interaction between math anxiety and math proficiency was established.

Keywords: math, education, math anxiety, fear of Covid-19, college students

1. Introduction

In the 21st century, where rapid changes are experienced, graduates trained by higher education institutions continue to access information through lifelong learning, and this process continues outside the individual's education process (Saykili, 2019). This highlights the need for graduates of higher education institutions to have the necessary capabilities, such as algorithmic thinking abilities and problem-solving abilities, and the skills to adapt quickly to changing learning methodologies and learning technologies (Dede, 2010; Partnership for 21st Century Learning, 2015). Therefore, higher education is an important step in classifying the increasing knowledge in the labor market, determining the relationship between different variables, determining the problems correctly and producing solutions, and preparing individuals who can cope with the problems (Odabaşı, Fırat & İzmirli, 2010; Rust & Kim, 2012; Sahin & Alkan, 2016). At this moment, the importance of mathematics education increases since society's future output depends on the ability of societies to raise people who can think and reason quantitatively.

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The rapid progress of technology and science today is changing the expectations of businesses from the education world. Mathematics is seen by people as the starting point of a good life and a good job (Arslan et al., 2013). That is why it's intended to generate individuals who can use their knowledge of mathematics to solve real-life problems, who can come up with creative solutions to those difficulties, and who are conscious of the close connection between mathematics and reality (Doruk & Umay, 2011). At the same time, mathematics is seen as an auxiliary element in understanding real life and generating ideas about life (Yurtbakan, et al., 2016). One of the most innovative ideas in education is for students to learn mathematics by understanding it. (Smith, 2000). Mathematically proficient people are the key to a fruitful future. Therefore, it has always been crucial for scholars in the area of mathematics education to focus on how students at different educational levels perform mathematically as well as psychological variables like anxiety, fear, and attitude.

Students' attitudes about mathematics are significantly impacted by 21st-century skills, which are expressed as problem-solving, questioning, analysis, and critical and creative thinking (Association of American Colleges and Universities, 2007). Apart from improving the mathematical literacy of learners, negative situations such as anxiety and fear developed against mathematics in terms of professional careers should be prevented. Although there is no single definitive definition of anxiety in the literature, Hançerlioğlu (1988) defined anxiety as fears or troubles whose reasons we cannot fully explain. Breuer (1999) stated that anxiety is a combination of physiological signs like a racing heartbeat, parched mouth, and sweaty palms as well as emotional impulses like anxiety, tension, and fear that are generated in the nervous system. Numerous studies have found that students who experience high anxiety are preoccupied, have difficulties in thinking clearly, and have very poor working memories. (Aronen et al., 2005). This is supported by numerous studies that highlight the importance of the association between anxiety and academic performance (McCraty et al., 2000; McCraty, 2007).

Emotional problems, especially anxiety, are one of the main problems with both teaching and learning mathematics (Baloğlu, 2001). Mathematics anxiety is expressed as a state of fear or tension triggered by the difficulty felt in doing math (Richardson & Suinn, 1972; Ashcraft & Moore, 2009). Similarly, Nolting (2010) defines mathematics anxiety as a negative attitude towards mathematics, and excessive emotional and/or physical reactions. From past to present, several studies have examined mathematics anxiety, which negatively affects mathematics performance, and will continue to be done in the future. Most of these studies focus on students' personal emotional experiences in mathematics classes (Solomon, 2007). To put it another way, it is depicted as an observation of the student's rising anxiety in a situation where the student must solve a mathematical issue that the student perceives as challenging. This anxiety reinforces the individuals' original fear, negatively impacts their desire for mathematics over time, and makes it difficult for them to complete the activity at hand (Başpınar, 2007). Poor performance as a result of these factors contributes to the individual's resistance to mathematics. Which of these elements contributes more to the initiation of math anxiety is a subject of debate. However, possible causes include poor classroom experiences,

environmental factors like instructor qualities, as well as intellectual factors like abstract or logical thinking, or self-esteem expressed as personality variables, learning style, attitude, and trust (Yüksel-Sahin, 2008; Devine et al., 2012). It is believed that mathematics anxiety manifests itself in people's negative behaviors, such as a higher unwillingness to learn mathematics and avoidance of mathematics (Ashcraft, 2002; Choe et al., 2019; Hayes, 2016; Hembree, 1990; LeFevre, Kulak & Heymans, 1992). Preschool is where students are introduced to mathematics for the first time and are taught to distinguish between abstract and concrete concepts in small steps. They are also encouraged to see math as more than just learning how to use numbers and operations. Thus, the notion that mathematics is a tool for play that promotes the growth of numerical abilities is created. Additionally, the capacity to deal with adverse outcomes like dread, reluctance, and avoidance that may result in math anxiety is strengthened. Academic research on the topic has shown that the detrimental experiences amassed during this time will last until higher education is completed, which is the process of developing a particular area of expertise (Meece et al., 1990; Ahmed, Minnaert, Kuyper & van der Werf, 2012; Ramirez, Shaw & Maloney, 2018). However, studies have found that those who struggle with math anxiety tend to make choices that include less usage of math when choosing their occupations, college majors, and future objectives (Ahmed et al., 2013; Ahmed, 2018; Ma, 1999; Madjar et al., 2018). This result illustrates how prevalent math anxiety is throughout schooling, from kindergarten through college graduation. It demonstrates that one of the most important indicators of the effects of negative math experiences is math anxiety.

Strong mathematics skills are necessary for both obtaining an undergraduate degree in higher education and becoming an expert in a variety of fields, including science, technology, and engineering (National Mathematics Advisory Panel, 2008; Reyes, 2010). However, it is well recognized that pre-higher students frequently experience math anxiety when they do not possess appropriate mathematical knowledge. Recent findings from international studies support that this is indeed a general problem among adolescents (Foley et al., 2017). Most of the studies about math anxiety focus on students before higher education. Therefore, considering the presence of mathematics anxiety and its negative effects on mathematics learning, investigating how it affects the undergraduate education process and how its results are shaped will be an important starting point for future plans.

A limited number of studies have investigated mathematics anxiety and its relationship with other variables for students continuing their education at universities in Turkey. A certain majority of the studies investigate the changes in variables such as gender, grade level, and academic achievement. For instance, it's not always clear how gender affects math anxiety from research that has been done. Certain studies have shown that female students experience more math anxiety than male students. In other words, some studies have shown that the level of math anxiety is higher in female students compared to male students (Baloğlu, 2004; Betz, 1978; Doruk & Kaplan 2013; Escalera-Chávez et al., 2017; Frenzel et al., 2007; Goetz et al., 2013; Güven, 2016; Hembree, 1990; Wilder, 2012; Yenilmez et al., 2004). In other studies, the levels of math anxiety among male and female students did not differ considerably. (Aksu, 2012; Aydın, 2011;

Özdemir & Sezginsoy Şeker, 2017; Pamuk & Karakaş, 2011; Taşdemir, 2013; Üldas, 2005). Numerous studies looking at how math anxiety develops among university students according to grade level have shown that there are various relationships between the components as well. Some researchers claim that as the grade level rises, math anxiety grows (Arıkan, 2004; Birgin et al., 2010; Dursun & Bindak, 2011). On the contrary, other research indicates that as grade level increases, math anxiety reduces (Aydın et al., 2009; Levere & Kahlon, 2019; Özdemir & Sezginsoy Şeker, 2017). When this result is evaluated in terms of mathematics anxiety, it can be attributed to the fact that many programs in higher education offer basic mathematics lessons to students in the first years and the anxiety is at the level of damped behavior for advanced grade levels (Lever & Kahlon, 2019; Wahid et al., 2014; Yenilmez et al., 2004). According to published studies on the connection between mathematics anxiety and mathematical achievement, there is a poor connection between students' academic performance and their level of anxiety (Ashcraft & Faust, 1994; Ashcraft & Kirk, 2001; Buelow & Frakey, 2013; Hembree, 1990; Ma, 1999; Nunez-Pena. et al., 2013; Yenilmez & Özbey 2006; Wahid et al., 2014).

When the studies that take mathematics anxiety into account are examined, it is a limitation that the sample selection of a small number of studies was conducted on students who continue their university education in business faculties. As the research sample of this study is limited to the students that continue their education in a business faculty, this can be considered as a drawback given the studies that account for mathematics anxiety. The results of a study by Yenilmez, Girginer, and Uzun (2004) with students in the first, second, third, and fourth grades of the Faculty of Economics and Administrative Sciences, Business Administration, Economics and Finance Departments revealed that the students' math anxiety levels did not significantly change according to gender; however, a significant difference was seen in the department, grade level, mathematics course, and overall academic achievement. Another study was conducted by Demiroğları (2018) with first-year students studying in four different departments (International Business, International Trade and Logistics, International Finance and Banking, and International Relations) selected from the Faculty of Economics and Administrative Sciences. In this study, no significant difference was found between the variables of university students' gender, department, mother and father education level, and math anxiety level scores. Additionally, it was stressed in a different study by Pamuk and Karakaş (2011) on first-year students only enrolled in traditional (on-campus) and distance education at the Faculty of Economics that distance education increases mathematics anxiety. Moreover, it was noted that there was a gender difference in distance education students even though there was no statistically significant difference between male and female students studying on campus in the study.

Many studies have been done on students at different educational levels, from pre-school to university, looking at the connections between math anxiety and the factors that create this anxiety. For this reason, it was believed that the dread of COVID-19, which is one of the unpredictable deep, and destructive consequences on people and nations all over the world, should be included in this research. Even today, the effects and consequences of the pandemic on health and education continue. The pandemic's

consequences and lasting effects on health and education are still being felt today. It reveals the necessity of developing and using new and different education modules with the effect of health and education pandemics, which are two main factors affecting individuals. It has become necessary to use several education modules in order to continue instruction during the pandemic. Because of the pandemic, education is moving toward a time when distance learning resources and techniques are widely used, which makes it harder to handle anxiety in university students. The COVID-19 fear scale was used in this study to evaluate the math anxiety of the research sample. Consequently, the following research questions were developed:

- 1) Do these students' levels of math anxiety differ by gender after calculating the fear scores of those who continue their education in all grade levels?
- 2) Do these students' levels of math anxiety vary in accordance with their grade levels after the fear scores of those who continue their education at all grade levels are computed?
- 3) Do these students' levels of math anxiety change depending on the department they are studying after calculating the fear ratings of those who continue their education at all grade levels?
- 4) Is there a connection between students at the Faculty of Business Administration's levels of math anxiety and the amount of time they devote to studying?
- 5) Is there a connection between the Faculty of Business Administration students' math anxiety levels and their grade point averages (GPA)?

The findings will provide an understanding of the emotional and physical pressure students feel during mathematics education given to students who are not familiar with distance education during the pandemic period. As a consequence, academics will find it less difficult to comprehend the connection between students' math anxiety and academic performance, leading to an improvement in educational quality. In this way, the anxiety problem in students' math comprehension skills will be resolved.

2. Method

2.1 Research Design

In the established model, the aim is to examine the relationship between two or more variables (Karasar, 2014).

2.2 Participants

Prior to the research, the necessary ethics committee permissions were obtained from Halic University Non-Interventional Clinical Research Ethics Board. Before the research was conducted, the students who were informed about the research topic were asked to answer the questionnaire voluntarily. The research was conducted with students who participated voluntarily. The research area consists of 329 students enrolled in the 1st, 2nd, 3rd, and 4th grades of six different departments who continue their education at the Faculty of Business Administration of a private university. The sample was determined using the convenience sampling method, which is known as an effective method for

reaching quickly more participants (Wiersma & Jurs, 2009). Data were provided by using e-mail or social media tools such as WhatsApp, Facebook, Twitter in the Spring 2020 period, when distance education continued due to the pandemic. There are 132 male (40.1%) and 197 female (59.9%) students in the collected data.

2.3 Data Collection Tools

Mathematics anxiety level data of students were obtained by using the Mathematics Anxiety Inventory (TCI), which was adapted into Turkish by Akçakın, Cebesoy, and İnel (2015). Bai et al. (2009), using the mathematics anxiety scale in Betz's (1978) study, developed this scale to examine mathematics anxiety in two dimensions as negative and positive effects. The anxiety scale used is a 5-point Likert-type scale and consists of two dimensions, negative (8 items) and positive (6 items). For examples of "I think I will use mathematics in the future" and "Mathematics is a very difficult lesson for me" are two statements for positive and negative items, respectively. The scale includes response options of (1) "strongly disagree", (2) "disagree", (3) "undecided", (4) "agree", (5) "strongly agree" for negative items. The highest score obtained from this scale expresses high level of anxiety and the highest score is 70. On the contrary, the lowest score is 14, indicating a low level of anxiety. The Cronbach's alpha reliability coefficient of MAS was equal to .91. Similarly, Cronbach's alpha reliability coefficient was equal to .876.

In addition, the COVID-19 Fear scale was applied to the students and the scores obtained from this scale were used as a control variable (covariate). COVID-19 Fear was measured using a scale, that was adapted to Turkish by Satici et al. (2020). The scale used has a single-factor structure consisting of seven items. This scale includes 5-point Likert-type scale, and the total score that can be obtained varies between 7 and 35. The high scores indicate a high level of coronavirus fear. The Cronbach alpha reliability coefficient of the COVID-19 Fear scale was equal to .847. In this study, the Cronbach alpha reliability coefficient was equal to .813.

2.4 Data Analysis

Data were evaluated using the SPSS 21.0 package program. The COVID-19 Fear scale scores were employed as a control variable in data analysis (covariate). While controlling for students' fear of COVID-19, a one-way analysis of covariance (ANCOVA) was conducted to determine whether there were any gender, grade level, or department differences in the levels of math anxiety among students. By applying the correlation analysis, it was tried to understand the mathematics anxiety levels of the students and the time they spent on learning, and to solve the connection between their anxiety and grade point averages.

2.5 Validity and Reliability Analysis and Ethics

After checking the necessary assumptions in the current study, it was determined whether the data showed a normal distribution and started to answer the research questions. The normal distribution is used to determine the parametric or non-parametric test types to be applied. The skewness and kurtosis values were evaluated to determine

whether the scores show normal distribution. In addition, the distribution of the data was evaluated on the histograms. Lomax and Vaughn (2012) stated that the data whose skewness and kurtosis values are in the range of ± 2 show normal distribution. Accordingly, when the distribution of mathematics anxiety scores was examined, the scores showed a normal distribution. In addition, it was observed that the assumptions of homogeneity of variances and homogeneity of regression slopes were met. Therefore, the parametric tests, that is, one-way analysis of covariance, can be used.

The Haliç University Non-Interventional Clinical Research Ethics Committee approved this study on June 26, 2020, with resolution 107/1. All the rules established in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed from the initial design through the research's execution, from data collection to data analysis.

3. Findings

The first part of the findings analyses the demographic characteristics of the research sample. This research was conducted with 329 Faculty of Business students. Table 1 shows the demographic characteristics of the research sample.

Table 1: Frequency and Percentage of the Students Participating in the Study

Variables	n (%)
Gender	
Male	132(40.1)
Female	197(59.9)
Grade Level	
Freshmen	82(24.9)
Sophomore	82(24.9)
Junior	51(15.5)
Senior	113(34.3)
Department	
Business Informatics	93(28.3)
Public Relations and Publicity	53(16.1)
Tourism Management	13(4.0)
Business Administration	93(28.3)
Political Science and International Relations	36(10.9)
International Trade and Management	39(11.9)

The first research question is to measure the mathematics anxiety levels of the Faculty of Business students whose COVID-19 fear levels were controlled on the gender variable. A one-way analysis of covariance results for gender is presented in Table 2.

Table 2: Results of One-Way Covariance Analysis Showing the Change of Mathematics Anxiety Level Scores of Business School Students by Gender

	Sum of Squares	df	Mean Squares	F	p
Coronavirus Fear Scores	2111.86	1	2111.86	15.611	.000
Gender	207.04	1	207.04	1.530	.217
Error	41394.80	306	135.277		
Total	438418.80	308			

According to the results in Table 2, after controlling the COVID-19 fear scores, there was no statistically significant difference in the mathematics anxiety levels of male and female students in the Faculty of Business Administration ($F(1,306) = 1.53, p = .217$).

In the second question, after calculating students' COVID-19 fear scores at all grade levels, math anxiety levels were examined according to the grade level. The outcomes of the one-way analysis of the covariance for a grade level are depicted in Table 3.

Table 3: Results of One-Way Analysis of Covariance Showing the Change of Mathematics Anxiety Level Scores of Faculty of Business Administration according to "Grade Level"

	Sum of Squares	df	Mean Squares	F	p
Coronavirus Fear Scores	2358.50	1	2358.50	17.339	.000
Gender	88.51	3	29.50	0.217	.885
Error	41214.25	303	136.02		
Total	43642.52	307			

When Table 3 is examined, it is seen that there is no significant difference in the mathematics anxiety level scores of the Faculty of Business Administration students according to the grade level ($F(1,303) = 0.217, p = .885$).

The next research question, measures mathematics anxiety according to the departments where the students continue their education. One-way covariance analysis results for the research question are given in Table 4.

Table 4: Results of One-Way Analysis of Covariance Showing the Change of Mathematics Anxiety Level Scores of Faculty of Business Administration According to "Departments"

	Sum of Squares	df	Mean Squares	F	P
Coronavirus Fear Scores	2067.68	1	2067.68	15.735	.000
Department	2057.25	5	411.450	3.131	.009
Error	39422.15	300	131.41		
Total	43722.04	306			

As seen in Table 4, after controlling the COVID-19 fear scores, there was a statistically significant difference in students' mathematics anxiety levels based on the departments they studied ($F(5,300) = 3.131; p < .01$). According to the results from the post-hoc analysis using Bonferroni correction, the students in the Public Relations and Publicity department ($M = 49.08$) had higher levels of mathematics anxiety than the students of the

Informatics department ($M = 42.28$). No statistically significant change was observed in the mathematics anxiety levels of students studying in the other departments.

In the last question, correlation analysis was carried out to demonstrate the relationship between the grade point averages of the students in the Faculty of Business and the amount of time allotted to mathematics instruction. The time spent by the participating students for learning varies between 0 and 10 hours, with an average of 3.17 ($SD = 1.86$) hours. In addition, students' grade point averages vary between 1 and 4, with an average of 2.37 ($SD = .57$). Pearson Correlation Analysis was used to measure the relationship between the time allocated to learning and grade point averages and mathematics anxiety level. The results obtained are summarized in Table 5.

Table 5: Pearson Product Moment Correlation Analysis Results
 for the Relationship Between the Math Anxiety Levels of Business Administration
 Faculty Students, Time Spent for Learning and Grade Point Averages

	Math Anxiety	Time Spent for Learning	Grade Point Averages
Math Anxiety	1		
Time Spent for Learning	.028	1	
Grade Point Averages	-.228*	-.001	1

According to these results, there was no significant relationship between the time spent on learning and mathematics anxiety level ($r = .028, p = .627$). However, a statistically significant, negative correlation was found between students' mathematics anxiety levels and grade point averages ($r = -.228, p < .001$).

4. Discussion, Conclusion & Implementation

This research was carried out with students from six different departments at the Faculty of Business Administration in a private university during the COVID-19 period. The objective of this research was to measure the mathematics anxiety and COVID-19 fear situations of all students continuing their education in the Faculty of Business Administration and to examine the relationship between them. In order to evaluate how the COVID-19 virus-induced fear or anxiety affects the level of math anxiety, the scale is used as a control variable. In addition, it was tried to determine whether mathematics anxiety levels changed when the students' COVID-19 fear was considered with the variables of academic achievement and time spent on learning.

Considering the Mathematics Anxiety Scale scores, the change in students' math anxiety by gender under the COVID-19 fear state was not statistically significant. This result is similar to the results of some researchers conducted with Faculty of Business Administration students in the literature (Demiroğlari, 2018; Yenilmez et al., 2004). Furthermore, studies completed with university students (Hamza & Helal, 2013; Haynes et al., 2004; Olson, 1985; Singer & Stake, 1986; Şahin, 2004; Tapia, 2004; Townsend, 1998) and vocational school students (Aksu, 2012; Taşdemir, 2013) found that math anxiety did not differ by gender.

A similar result found with the gender variable in the study was determined at the grade level. Accordingly, it was observed that the change in students' math anxiety was not significant at the grade level. In general, it is expected that 1st-grade students' math anxiety will be higher than other grade levels since the students of the Faculty of Business Administration take basic mathematics lessons in the first year (Leveré & Kahlon, 2019; Yenilmez et al., 2004, Wahid et al., 2014). This finding that there is no difference in the mathematics anxiety of business students can be interpreted as the right choice to enroll in this higher education program as a result of the university entrance exam applied in our country. It also shows that business students are students who have basic mathematical knowledge competence. In addition, university students (Cao et al., 2020) and people in different regions experience intense stress, anxiety, and depression during the pandemic process (Harper et al., 2020; Wang et al., 2020). The increase in fear and anxiety levels with the pandemic may cause these different effects on individuals.

It was discovered that the results of the students' scores on their degree of math anxiety varied according to the department in which they finished their studies. This result differs from similar studies conducted with Business Administration students in the literature (Demiroğları, 2018; Yenilmez, Girginer, & Uzun, 2004). Another significant result is that the students studying in the Department of Public Relations and Publicity (HİT) have a higher level of anxiety than the students studying in the Department of Business Informatics (ENF). It is possible to come across studies (Eldemir, 2006) in which the mathematics anxiety of students placed in any program of the university with a verbal score is higher than that of students placed with a numerical score. Considering that the field score type used in the placement of students studying in the HIT department at the university is evaluated according to the verbal score, unlike other departments, it is observed that the students in the HIT department take fewer mathematics lessons than other students during their undergraduate education. These findings can be interpreted as students who take more mathematics lessons showing less math anxiety (Baloğlu, 2001).

When the relationship between the mathematics anxiety levels of the faculty students and the time they devote to learning was examined, it was found that there was no significant change between these two variables. Based on the findings of Fennema (1989) students with high math anxiety spend less time on this lesson. Cho et al. (2019) emphasize the negative interaction of math anxiety with the time allocated to solve difficult math problems. This study found no relationship between the time spent on studying and mathematics anxiety, it is thought that the students spent their time on other lessons during this study process.

In the last part of the study, it was concluded that there was an inversely proportional change between the students' math anxiety level scores and their overall grade point averages. It is possible to express this inversely proportional change as the decrease in mathematics anxiety levels as students' academic achievement levels increase. This result coincides with previous studies in the literature (Cates & Ryhmer, 2003; Clute, 1984; Georges, et al., 2016; Leveré & Kahlon, 2019). In other words, the finding of the study that higher mathematics achievement means lower mathematics

anxiety is also supported by another study conducted on Faculty of Business Administration students. (Yenilmez, Girginer, & Uzun, 2004).

Since this research represents the students of the Faculty of Business Administration at a private university, it can be expressed as a limitation of the study. The findings obtained from the research cannot be generalized to all students in higher education due to the sample chosen from the population. Therefore, similar studies should be repeated with students from other faculties and universities. In addition, it was assumed that the information obtained from the self-report scales used to collect data reflects the true thoughts of the students. Although no personal data was collected during the data collection process, students' answers may be biased. Additionally, this study was conducted during the pandemic period, it is thought that students' mathematical anxiety levels may be affected by concepts such as fear, anxiety, or stress related to the pandemic. Although this effect was tried to be reduced by controlling the coronavirus fear levels of the students in this study, similar studies should be repeated using other control variables.

In addition, enabling students to increase their relationships with mathematics can be considered a step toward reducing mathematics anxiety. In students' future educational environments, positive relationships to be established with mathematics are expected to positively contribute to the orientation of individuals to mathematics-related areas in their career and career choices. When emotional reactions such as anxiety, worry, and fear are interpreted with mathematical thinking, it is thought that as mathematical thinking develops, the anxiety toward learning mathematics will decrease. For this reason, educational environments in which individuals will interact more with mathematics should be presented.

In this context, some suggestions can be made for the lecturers who teach especially in mathematics departments. For example, the learning approach in mathematics that includes abstract concepts that will enable students to internalize the subjects and be supported with examples from daily life may have an important place in controlling the students' math anxiety to some extent. It is important to prepare environments where students can find solutions to mathematical problems rather than just giving their solutions. The effect of the effective teacher-student relationship in education to reduce math anxiety shows the necessity of creating environments where students can feel comfortable.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author

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