

Test Anxiety, Academic Support, and Psychological Well-Being Among University Students

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ABSTRACT

Excessive test anxiety impairs students' cognitive functioning and psychological well-being, but peer support helps them cope effectively by fostering understanding, motivation, and emotional stability. Therefore, the study aimed to determine the correlation between test anxiety and academic support, the correlation between test anxiety and psychological well-being, and the gender differences. This study was conducted using a quantitative research method in which an online survey was distributed through WhatsApp, Facebook app, and emails. The total number of participants in the study was 150 university participants (N= 76 females, N= 74 males) from various public and private universities in Malaysia. The survey via Google Forms consisted of three instruments: the Westside Test Anxiety Scale (WTAS), the Student Academic Support Scale (SASS), and the Psychological Well-Being Scale (PWBS). Two types of analyses were conducted: descriptive analysis to examine participants' demographics, and inferential analysis (Pearson's correlation and t-test) to assess relationships among test anxiety, academic support, and psychological well-being, as well as gender differences in test anxiety. The results of the study showed that there was a positive correlation between test anxiety and academic support ($r = 0.401$, $p = 0.001$). Moreover, the results showed that there was a negative correlation between test anxiety and psychological well-being ($r = -0.463$, $p = 0.001$). There was also a gender difference in the level of test anxiety ($t = 3.67$, $p = 0.00$). The male participants ($M = 38.47$, $SD = 8.38$) recorded slightly higher test anxiety compared to the female participants ($M = 33.57$, $SD = 7.99$). These findings highlight the importance of providing adequate academic support and fostering psychological well-being to reduce test anxiety among students.

Keywords: academic support, examination, psychological well-being, quantitative research, test anxiety

Introduction

Test anxiety is a significant challenge for university students, particularly within Malaysia's exam-driven educational system. Spielberger and Vagg (1995, as cited in Putwain et al., 2021) describe test anxiety as a persistent tendency to view performance-evaluative situations as threatening, a pattern intensified in contexts where standardized examinations strongly influence future academic and career opportunities. Common symptoms such as nervousness, rapid heartbeat, negative thoughts, and sweating that often worsen during exam preparation, which have been shown to contribute to burnout, anxiety, and emotional distress (Yatkin et al., 2023).

Despite its prevalence, research on test anxiety in the Malaysian context remains limited. At the same time, academic support plays an important role in shaping students'

academic experiences, as university students often manage heavy workloads, extracurricular commitments, and pressure to excel. Formal academic support services may be less accessible, and students frequently rely on peer communication as their primary source of support (Thompson, 2008, as cited in Thompson & Mazer, 2009). Peer support promotes collaborative learning, fosters positive academic environments, and helps compensate for the loss of stable peer networks found in secondary school, particularly as university students face constantly changing classmates (Mazer & Thompson, 2011). Such support may influence students' ability to manage academic stressors, including test anxiety. Psychological well-being also plays a crucial role in students' ability to cope with academic demands. Tang et al. (2019) emphasize that mental health encompasses both psychological well-being and the absence of mental illness, noting that university students often experience declines in well-being due to heavy workloads, social adjustments, and the transition to independent living. Psychological well-being, characterized by emotional balance, meaningful goals, supportive relationships, and effective regulation of emotions (Tang et al., 2019), may reduce anxiety, suggesting that students with higher well-being may experience lower test anxiety.

In an ideal academic environment, students can manage test-related stress, maintain focus, and perform well with the support of peers and instructors who foster motivation, resilience, and psychological well-being (Yang & Wang, 2023). However, many students experience a different reality, as test anxiety, known to impair memory, attention, and retention, has remained widespread and has been worsened by the post-pandemic transition. Students now report heightened anxiety due to disrupted learning routines, and evidence from Selangor shows elevated depression (53.9%), anxiety (66.2%), and stress (44.6%) as they readjust to in-person learning (Wong et al., 2023; Yatkin et al., 2023). These difficulties undermine academic performance, reduce motivation, and increase psychological distress. Given these consequences, this study investigates the relationships among test anxiety, academic support, and psychological well-being to inform strategies that strengthen peer support, enhance coping, and promote healthier academic functioning.

Moreover, university life is a critical developmental period in which students must manage academic, social, and financial responsibilities, making strong performance in tests and examinations a central concern. Excessive worry about academic evaluation can negatively affect both psychological well-being and academic outcomes, and understanding these experiences is essential, as students' subjective well-being offers insight into individual differences in ability and achievement under demanding academic conditions (Steinmayr et al., 2016). Academic support and psychological well-being are, therefore, important coping resources that may help students navigate evaluative pressures; students who recognize the value of academic support may better manage test-related stress, while those who prioritize psychological well-being are often more resilient and prepared to cope with academic challenges. Psychological well-being enables individuals to realize their potential, manage daily difficulties, and function productively within their communities (Yatkin et al., 2023),

with higher well-being linked to greater self-esteem, confidence, resilience, and goal-directed behavior (Demirtas & Baytemir, 2019, as cited in Yatkin, 2023). Strong student support systems also contribute to healthier learning environments by providing emotional, cognitive, and practical resources that reduce stress and enhance academic performance, social skills, and mental health (Yang & Wang, 2023). Guided by these considerations, the present study aims to examine the factors associated with test anxiety among Malaysian university students by assessing correlations between test anxiety and academic support and psychological well-being, and by identifying gender differences in test anxiety levels.

After reviewing prior studies, the study identified three main objectives. The first objective was to determine the correlation between test anxiety and academic support among Malaysian university students. Secondly, it was to determine the correlation between test anxiety and psychological well-being among Malaysian university students, and, lastly, to determine the gender differences in the level of test anxiety among Malaysian university students.

Methods

This study implemented an online survey developed using Google Forms, a widely used platform for data collection in Malaysia. An online format was chosen because it allows the researchers to efficiently reach a large and diverse group of university students while ensuring convenient access for participants. Moreover, the online survey supports quick and cost-effective data collection. Data collection took place from 11 December 2023 to 19 January 2024, spanning a total duration of six weeks. The population size of the study is 150 participants, consisting of 76 females and 74 males. The required sample size was determined using G*Power version 3.1.9.7 software (two-tailed test, $\alpha = .05$, effect size = .3, power = .95). Given that the study included two independent variables, two independent groups were expected for analysis. A purposive sampling technique was employed in this study. Purposive sampling is a non-probability sampling method in which participants are chosen based on specific characteristics relevant to the research objectives. This technique is appropriate when the goal is to target a particular subset of the population that can provide meaningful and relevant data (Alchemer, 2021). Participants were permitted to take part in the study only if they met the specified criteria. To be eligible, individuals had to fulfill the inclusion criteria of volunteering to participate, being undergraduate students, being enrolled in Semester 2 to 7, and having previously taken a test or examination.

In the study, three instruments were used to measure test anxiety, academic support, and psychological well-being among university students. The instruments were the Westside Test Anxiety Scale (WTAS), the Students Academic Support Scale (SASS), and the Psychological Well-Being Scale (PWBS). The WTAS consists of ten items (e.g., “The closer I am to a major exam, the harder it is for me to concentrate on the materials,” “When I study, I worry that I will not remember the material on the exam.”) Each item shall be rated on a five-point Likert scale; 1= not at all or never true, 2= slightly or seldom true, 3=

moderately or sometimes true, 4= highly or usually true, 5= extremely or always true. According to Driscoll (2007), the Westside Test Anxiety Scale (WTAS) combined six items on cognition impairment and four items assessing worry and dread, in which these items are highly relevant cognitive and impairment factors, and to a small extent, relevant over-arousal factors. Hence, the WTAS has a high face validity. Face validity refers to the degree to which a psychological instrument appears to be effective in measuring its stated aim. Moreover, based on Talwar et al. al. (2019), the WTAS model has good reliability with a composite reliability value of .88, which is acceptable since the value exceeded the benchmark value of .70.

Next, The SASS consists of 15 items (e.g., “Another student explained how to solve a specific problem,” “Another student clarified how to do an assignment,”) and each item needs to be rated using a five-point Likert scale (not at all, once or twice, about once a week, several times a week, about every day). The SASS is reported to show evidence of convergent validity and construct validity. Mazer and Thompson (2011) stated that the SASS correlates well with the Inventory of Socially Supportive Behaviors (ISSB), in which both instruments measure the same construct. Hence, the SASS has significant evidence of convergent validity. In addition, the SASS shows strong evidence of construct validity. According to current research, there is a strong correlation between student academic support and motivation, engagement, and affective learning, which strengthens the construct validity evidence for the Student Academic Support Scale (Mazer & Thompson, 2011).

Lastly, the PWBS consists of 14- items (e.g., “In general, I feel I am in charge of the situation in which I live,” “The demands of everyday life often get me down,”) with a six-point Likert scale (1= strongly disagree, 2= moderately disagree, 3= slightly disagree, 4= slightly agree, 5= moderately agree, 6= strongly agree). In a study carried out by Bayani et. al. (2008), PWBS showed a high value of test-retest reliability, which is .82. Hence, the Psychological Well-Being Scale by Ryff is suitable to be used to assess psychological well-being among students in Malaysia.

Mainly, there are five parts of the online survey that require the participants’ attention. Part I provided the participants with general instructions and an informed consent form. Part II is the Demographic Information, to collect the participants’ demographic information. Part III is the questionnaire of the Westside Test Anxiety Scale (WTAS). Parts IV and V are the Students Academic Support Scale (SASS) and Psychological Well-Being Scale (PWBS), respectively. Only the participants who answer the questionnaires are included in the final data collection.

To reach the participants from multiple universities, the survey link and a promotional poster were distributed via WhatsApp, Facebook, and email. This approach provided participants with flexible access to the survey, allowing them to respond at a time that suited them best and improved overall participation. In Part I: Informed Consent, participants

were provided with an informed consent form to confirm their voluntary participation. They were assured that their responses and data would remain strictly confidential and be used solely for academic purposes. The researcher's contact information was included for any questions regarding the study. Additionally, participants were informed of the potential risks and benefits associated with their participation.

After the data was collected, it was analyzed using the IBM SPSS (Statistical Package for the Social Sciences). Two types of data analysis were conducted, descriptive analysis and inferential analysis, consisting of Pearson's correlation coefficient analysis and the t-test analysis. The descriptive analysis was used to analyze the participants' characteristics and demographic information. Pearson's correlation analysis was used to determine the direction and strength of the relationships between the study variables. This statistical technique is appropriate when the objective is to determine whether a linear relationship exists between two continuous variables. In this study, the analysis was conducted to assess two relationships (Akoglu, 2018; Schober et al., 2018). The first relationship determined was between academic support (independent variable) and test anxiety (dependent variable), while the second relationship determined was between psychological well-being (independent variable) and test anxiety (dependent variable). Pearson's correlation coefficient (r) provides information on both the magnitude and direction of the relationships, indicating whether the variables are positively or negatively related and the extent to which they are associated (Schober et al., 2018). Therefore, Pearson's correlation was suitable for determining whether variations in academic support and psychological well-being are associated with differences in levels of test anxiety among participants.

Results

Descriptive Analysis

Test anxiety, academic support, and psychological well-being were analyzed. The mean (M) and standard deviation (SD) were calculated. M is the average value of the data collected, and the SD is a measure of how much the data spreads from its mean.

Table 1 Summary Table of Mean and Standard Deviation for Variables

	Mean (M)	Standard Deviation (SD)
Test Anxiety	35.99	8.52
Academic Support	50.42	14.31
Psychological Well-being	50.19	7.90

The mean and standard deviation of test anxiety, academic support, and psychological well-being are shown in Table 1. The test anxiety in the study has $M = 35.99$ and $SD = 8.52$. The academic support has $M = 50.42$ and $SD = 7.90$. Lastly, the psychological well-being has $M = 50.19$ and $SD = 7.90$.

Table 2 Summary Table Test Anxiety

	Frequency (f)	Percentage (%)
Low test anxiety	7	4.67
Average test anxiety	14	9.33
Normal test anxiety	10	6.67
Moderately high test anxiety	31	20.67
High test anxiety	20	13.33
Extremely high test anxiety	68	45.33

Table 2 shows the summary table of test anxiety. The table presents six levels of test anxiety, which are low, average, normal, moderately high, high, and extremely high. Based on the study, extremely high test anxiety was reported by 68 participants (45.33%). The level of test anxiety with the lowest percentage is low test anxiety (4.67%) reported by 7 participants.

Table 3 Summary Table Academic Support

	Frequency (f)	Percentage (%)
High academic support	4	2.67
Normal academic support	78	52.00
Moderate academic support	35	23.33
Low academic support	27	18.00
No academic support	6	4.00

Table 3 shows the summary table of academic support. The table presents five levels of academic support, which are high, normal, moderate, low, and no academic support at all. Based on the study, the highest percentage recorded is 52.00% (78 participants) who scored normal academic support. The level of academic support with the lowest percentage is high academic support reported by 4 participants (2.67%).

Table 4 Summary Psychological Well-being

	Frequency (f)	Percentage (%)
Low psychological well-being	1	0.67
Normal psychological well-being	140	93.33
High psychological well-being	9	6.00

Table 4 shows the summary of the levels of psychological well-being among the participants. The Ryff Psychological Well-Being Scales have not published global cut-off scores to classify high and low scores. Hence, by assuming a normal distribution sample, the low and high scores are identified through lower and upper quartiles (25.00%). Based on the study, there are three quartiles, or three levels of psychological well-being, reported among university students in Malaysia. A low level of psychological well-being is reported by 1 participant (0.67%), a normal level of psychological well-being is reported by 140 students (93.33%), and a high level of psychological well-being is reported by 9 participants (6.00%). From the results, the majority of university students in Malaysia have a normal level of psychological well-being, with a percentage of 93.33%.

Inferential Analysis

The hypotheses of the relationship between test anxiety and academic support are:

H₀₁: There is no relationship between test anxiety and academic support among university students in Malaysia.

H₁₁: There is a relationship between test anxiety and academic support among university students in Malaysia.

A Pearson correlation coefficient was computed to assess the relationship between test anxiety and academic support among university students in Malaysia. There is a positive correlation between the two variables, $r(148) = .401$, $p = .001$, two-tailed. Based on Table 4.6, the results show a statistically significant positive correlation between test anxiety and academic support in this study. The value of the Pearson coefficient, $r(148) = .401$, shows that the two variables have a moderate positive correlation. If the academic support needed increases, then the level of test anxiety also increases. Hence, the null hypothesis, H₀₁, is rejected, and the alternative hypothesis, H₁₁, is accepted. There is a statistically significant positive correlation between test anxiety and academic support among university students in Malaysia.

The hypotheses of the relationship between test anxiety and psychological well-being are:

H₀₂: There is no relationship between test anxiety and psychological well-being among university students in Malaysia.

H₁₂: There is a relationship between test anxiety and psychological well-being among university students in Malaysia.

A Pearson correlation was computed to assess the relationship between test anxiety and psychological well-being among university students in Malaysia. There is a negative correlation between the two variables, $r(148) = -.463$, $p = 0.001$, two-tailed. Based on Table 4.7, the results show a statistically significant negative correlation between test anxiety and psychological well-being in this study. The value of the Pearson coefficient, $r(148) = -.463$, shows that the two variables have a moderate negative correlation. If the level of psychological well-being increases, then the level of test anxiety decreases. Hence, the null hypothesis, H₀₂, is rejected, and the alternative hypothesis, H₁₂, is accepted. There is a statistically significant negative correlation between test anxiety and psychological well-being among university students in Malaysia.

The hypotheses of the gender differences in the level of test anxiety:

H₀₃: There is no gender difference in the level of test anxiety among university students in Malaysia.

H1₃: There is a gender difference in the level of test anxiety among university students in Malaysia.

Based on Table 4.8, an independent t-test was conducted to compare the level of test anxiety for males and females. There were significant differences ($t(148) = 3.67, p = 0.000$) in the score, with the mean score for males ($M = 38.47, SD = 8.38$) being higher than females ($M = 33.57, SD = 7.99$). The magnitude of the differences in the means (mean difference = 4.90718, 95% CI: 2.26433 to 7.55004) was significant. Hence, H1₃ was supported. There is a significant gender difference in the level of test anxiety among university students in Malaysia.

Discussions

Level of Test Anxiety, Academic Support, and Psychological Well-Being

The findings of this study revealed several important patterns in test anxiety, academic support, and psychological well-being among undergraduate students in Malaysia. Overall, participants demonstrated varying levels of test anxiety; however, the majority of the participants experienced extremely high levels of test anxiety. Using the WTAS, which assesses both cognitive and anxiety impairment domains, the results suggested that cognitive factors play a major role in increased anxiety levels. This can be understood through research by Chakraborty and Abhinandita (2023), who explained that students with heightened test anxiety often experience cognitive overload, making it difficult to filter essential information, organize thoughts logically, and integrate new content effectively. Such cognitive strain can cause disorganization under pressure, thereby worsening anxiety and impairing academic performance. Additionally, parental education may influence anxiety levels, as Desai et al. (2020) noted that students with highly educated parents often feel pressure to perform well academically, which increases anxiety during a test. Hence, future studies should include the parents' study background to acquire better results.

In terms of academic support, participants reported varying degrees of support, with most reporting normal levels of support. This was consistent with the collaborative learning culture present in many Malaysian universities, where group work, peer tutoring, and study groups are commonly practiced (Samri & Jumaat, 2024; Aziz et al., 2024). These peer supports serve both academic and emotional functions, enhancing comprehension through active engagement while reducing feelings of isolation during stressful academic periods. Govindarajoo et al. (2023) further emphasized that more engaged students often guide their less involved peers, contributing to improved group outcomes and collective academic success.

The findings also showed that most participants reported normal psychological well-being despite academic pressures. This suggests that existing support systems may help students manage stress effectively. The students may benefit from the current academic

environment's support systems, which include peer groups and collaborative learning, to effectively manage these pressures (Zhu et al., 2025). Worsley et al. (2022) highlighted that academic institutions increasingly recognize the need for diverse and accessible mental health interventions, offering multiple pathways for students to maintain their psychological well-being. The prevalence of normal well-being among participants indicates that such initiatives may function effectively within the academic context.

Relationship between Test Anxiety and Academic Support

The results of this study indicated that higher levels of academic support were associated with higher levels of test anxiety. This finding contradicts previous research, which generally reports that increased academic support tends to reduce test anxiety. A study by Ortega-Donaire et al. (2023) showed that participants who received social support scored low on the anxiety test. Therefore, there were several factors that may explain this discrepancy. Much of the existing literature comes from Europe and China, where cultural norms, values, and educational environments differ substantially from those in Malaysia. Cultural contexts shape students' learning experiences, expectations, and adjustment processes, meaning findings from Western or East Asian contexts may not fully reflect the realities of Malaysian students (Miao & Zhang, 2024). In some cultures, particularly those that place strong emphasis on academic excellence and competitive achievement, students may experience heightened pressure to perform well and meet institutional or societal expectations (Chen et al., 2025; Tang, 2024). Academic support and peer support may be perceived as expectations, and falling out of expectation may be perceived as a source of disappointment or shame, thereby intensifying anxiety. Celik and Yildirim (2019) noted that high pressure from oneself and significant others can amplify stress related to test anxiety. In this context, normal or moderate levels of academic support may be insufficient to improve anxiety; instead, peer support may inadvertently contribute to increased pressure to excel, increasing test anxiety rather than reducing it.

Additionally, the lack of comprehensive demographic information in the current study may limit understanding of environmental factors that influence anxiety levels. Parental education, for instance, has been shown to play a meaningful role. Desai et al. (2020) reported that students with highly educated parents often benefit from more effective academic guidance and emotional support, which can reduce test anxiety. Parents may provide strategies that enhance understanding and confidence, contributing to lower anxiety levels and a more positive academic experience (Zimmer-Gembeck et al., 2023; Li, 2025). Supportive parental involvement can strengthen students' coping strategies and emotional regulation when dealing with academic stressors. Without considering these variables, the relationship between academic support and anxiety may appear inconsistent, as parental involvement can function either as a protective factor that reduces anxiety or, when perceived as pressure, as a contributor to stress and emotional difficulties (Li, 2025).

Furthermore, the perceived adequacy of academic support is critical. Insufficient support from teachers, counsellors, or parents may lead to increased test anxiety, particularly when students feel unprepared or misunderstood in the learning process (Putwain et al., 2021; Li et al., 2025). A lack of guidance in mastering course content or preparing for examinations can heighten uncertainty and academic stress, which subsequently worsens students' anxiety during evaluative situations (Putwain et al., 2021). Thus, while academic support is generally considered a protective factor, its effectiveness depends on the quality and perception of the support received, which may determine whether it alleviates or intensifies test anxiety (Li et al., 2025).

Relationship between Test Anxiety and Psychological Well-Being

Another objective of this study was to determine the correlation between test anxiety and psychological well-being among Malaysian university students. The findings revealed a significant negative relationship between the two variables, indicating that students with higher psychological well-being tend to experience lower levels of test anxiety. This outcome is consistent with previous research supporting the negative correlation between psychological well-being and test anxiety.

According to Ryff's (1989) Psychological Well-Being Scale, individuals with higher psychological well-being demonstrate a strong sense of competence, effective management of their environment, and the ability to capitalize on opportunities aligned with their needs and values. In contrast, individuals with lower psychological well-being often struggle with daily responsibilities, feel overwhelmed by external demands, and perceive limited control over their circumstances. The present study found that students who scored higher on the PWBS recorded lower scores on the WTAS, suggesting that those who feel more capable and in control of their academic environment are less likely to experience anxiety during tests and examinations. These findings align with Yatkin et al. (2023), whose research showed that mental well-being decreases as test anxiety increases. Their study, conducted among 427 senior high school students in Turkey preparing for university entrance exams, highlighted the lingering psychological effects of the COVID-19 pandemic. The prolonged shift to online learning, followed by a sudden return to physical schooling, contributed to students' difficulty in regulating their psychological well-being. This diminished sense of control may heighten anxiety, particularly in high-stakes academic contexts. Similarly, Malaysian students in the current study may experience challenges in managing psychological well-being due to academic transitions and ongoing post-pandemic adjustments, resulting in elevated test anxiety during examination periods.

Gender Differences in The Level of Test Anxiety

The last objective of the study is to determine the gender differences in the level of test anxiety among Malaysian university students. Based on the findings, there is a gender

difference in the level of test anxiety among university students in Malaysia. The level of test anxiety in male students is higher compared to that of females. However, the study's findings contradict the previous studies.

Yatkin et. al. (2023) and Núñez-Peña et al (2016) suggested that their study revealed a significant difference in the participants' test anxiety by gender. They found that female participants scored higher in test anxiety than male participants. Considering the culture in Turkey, females are often discriminated against, and they are pressured to perform well in examinations. The higher test anxiety levels among female participants can be explained by considering that females often consider having a successful career and performing well in schools to avoid social role perceptions (Yatkin et. al., 2023). Furthermore, the pressure experienced by female students may be intensified by traditional gender roles and societal expectations. Research indicates that gendered socialisation and societal norms influence students' psychological experiences in academic settings, with female students often reporting higher levels of academic-related stress and emotional difficulties than their male counterparts (Elvira-Zorzo et al., 2025). Cultural expectations surrounding achievement and performance may therefore contribute to increased test anxiety among female students who feel compelled to meet both academic and social standards of success (Tang, 2023; Elvira-Zorzo et al., 2025). These factors emphasise how crucial it is to address gender-specific needs in educational settings to reduce unnecessary stress and encourage an equal learning environment.

One way to explain the mixed results in literature is by considering cultural and socioeconomic differences. Malaysia is a developing country that often promotes equality and equity in most sectors, especially in the education sector. Bakar (2022) stated that the principles of Education for All (EFA), which prioritize equality and equity, are periodically reviewed and continue to be practiced in Malaysia's education sector. Therefore, the culture in Malaysia that encourages equal learning rights may be the key factor to the low level of test anxiety of female participants in the study. However, males are expected to be the primary breadwinners and achieve economic success in Malaysia; thus, they may feel a little more anxious during tests. Academic achievement is frequently perceived as an important pathway to socioeconomic mobility and future career opportunities, thereby intensifying performance pressure among students (Pérez-Jorge et al., 2025). During examinations, this pressure to perform well may heighten stress and anxiety, particularly when students perceive test outcomes as critical indicators of their competence and future success (Lu et al., 2024). In many Asian societies, including Malaysia, traditional gender role ideologies commonly position men as the primary breadwinners responsible for providing financial support for their families (Chai & Karubi, 2018; Lee, 2022). These cultural expectations reinforce the belief that men are the main economic providers within the household, reflecting the persistence of the male-breadwinner model in many Malaysian families. Furthermore, the competitive nature of modern educational systems may amplify these

pressures, leading students to feel compelled to perform above average to meet both personal and societal expectations (Pérez-Jorge et al., 2025).

Limitations of The Study

The limitation of the study is due to the type of research design, which is a survey. The data collected on test anxiety, academic support, and psychological well-being relied on self-report measures. There is a tendency for self-report bias by the participants in the study, as the participants provided information and data about their own experiences, behaviors, feelings, and emotions. Based on the study, participants must recall their experiences and feelings for the past month and during a test or examination period. Hence, recall bias may occur as accurately recalling past experiences can be challenging. Participants might forget the details of their intensity of anxiety and worry, the amount of support they received, and their state of psychological well-being while answering the survey questionnaires.

Next, the tendency of expectation bias. When participants or researchers unintentionally affect study results because of their prior knowledge or expectations, this is known as expectation bias. Participants may change their answers depending on what they think the researchers should discover or what they consider to be the "correct" response. To conform to expectations, students may increase their feelings of anxiety if they are aware that the study is looking into text anxiety. Moreover, the researcher may interpret data or interact with participants in ways that confirm their expectations if they have prior beliefs about the relationship between text anxiety, academic support, and psychological well-being. For instance, the researcher may unintentionally concentrate more on data that confirms their hypothesis if they think that text anxiety is decreased by strong academic support.

The language used in the survey is also limited. The survey used the English language, which is not a native language to the sample population, as the main spoken language is Malay. The students who are native to English are most likely to have a better understanding and comprehension of the items in the survey. However, Malaysian students who are native to Malay are most likely to have difficulty understanding and comprehending the items, resulting in misinterpretation of the items. Research in Malaysia demonstrates that even among university students who self-assess their English proficiency, substantial difficulties exist in interpreting items, particularly when the instrument is not aligned with their language competence (Tengku Mohamed Fauzi, Yusoff, & Ramli, 2024).

Recommendation for Future Research

Test anxiety is a common issue among university students in Malaysia. The study showed findings of the correlation between test anxiety, academic support, and psychological well-being. However, there are a few recommendations that should be considered to carry out future research regarding these variables.

Firstly, future studies should consider collecting data in different cities, states, and districts with an equal distribution. Through the examination of various geographic regions, researchers may identify regional factors such as local educational policies, socioeconomic conditions, cultural attitudes, and the availability of mental health resources that impact test anxiety and psychological well-being. For example, pressures facing students in urban areas might be different from those facing students in rural areas, where there might be major differences in access to educational resources and support systems. Furthermore, future studies could focus on the relationships between various sociodemographic factors and psychological well-being in a range of age groups. Students' experiences of anxiety and general mental health may be significantly influenced by factors such as family income level, parental education, work status, family structure, and whether they live in an urban or rural area. Knowing these factors can make it easier to identify vulnerable populations and design interventions that are tailored to their requirements.

Next, future researchers can investigate the long-term effects of test anxiety on students' academic support and psychological well-being by conducting longitudinal studies. These studies could follow students for several years, giving valuable information about how test anxiety changes and grows with time. Researchers can investigate how societal perceptions of gender and parental influence interact with test anxiety and impact students differently as they advance in their studies. For instance, parental support and involvement can have a big impact on students' stress levels and coping strategies, while societal expectations may put different types of pressure on male and female students. By focusing on these areas, future research can help create focused interventions that lower test anxiety, improve mental health, and strengthen student support for their studies.

To conclude, it takes a comprehensive approach that takes into consideration different cultural, socioeconomic, and demographic factors to fully understand the multifaceted nature of test anxiety. Researchers can gain more insight into the causes and long-term effects of test anxiety by carrying out additional research in various demographic groups and geographical areas, as well as by using longitudinal studies. Future study is important to develop successful programs that assist students' academic support and psychological well-being and promote an equal and encouraging learning environment.

Conclusion

This study highlights the complex relationships among test anxiety, academic support, and psychological well-being among Malaysian university students. The findings indicate that students experience varying levels of test anxiety, influenced by cognitive overload, parental support, and socio-cultural expectations. Academic support, while generally beneficial, may sometimes heighten anxiety if perceived as performance pressure, emphasizing the importance of quality and context-sensitive support. Conversely, higher psychological well-being was consistently associated with lower test anxiety, suggesting that

students who feel competent, in control, and able to manage their academic environment experience reduced stress during examinations. Gender differences further revealed that male students may experience greater anxiety due to societal expectations, highlighting the need for culturally informed and gender-sensitive interventions. Collectively, these results underscore the necessity for universities to implement targeted strategies, including enhancing the quality of academic support, promoting psychological well-being, and providing tailored guidance to address students' unique academic and emotional needs. By doing so, institutions can foster a supportive learning environment that mitigates test anxiety, strengthens resilience, and enhances overall student well-being and academic performance.

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References

- Akoglu, H. (2018). User's guide to correlation coefficients. *Turkish Journal of Emergency Medicine, 18*(3), 91–93. <https://doi.org/10.1016/j.tjem.2018.08.001>
- Alchemer (2021, August 26). Purposive sampling 101. *Alchemer*. Retrieved from <https://www.alchemer.com/resources/blog/purposive-sampling-101/>
- Aziz, N. S., Ismail, M., Suhaimin, M. F., Wan Nordin, W. N. H., & Mohamed, F. (2024). The effectiveness of collaborative learning in higher educational system: A study case in UiTM Kelantan branch. *International Journal of Modern Education, 6*(22). Retrieved from <https://gaexcellence.com/ijmoe/article/view/4131>
- Bakar, A. Y. (2022). The equal and equitable provision of primary school education in Malaysia: Issues and challenges. *13th Global Conference On Business And Social Sciences, 13*(1), 1-1. doi: 10.35609/gcbssproceeding.2022
- Çelik, E., & Yıldırım, S. (2019). Examining test anxiety in terms of academic expectations stress and motivation to study. *Pegem Eğitim ve Öğretim Dergisi, 9*. 1139-1158. doi: 10.14527/pegegog.2019.037.
- Chai, E. C. Y. N., & Karubi, N. P. (2018). Gender socialisation and its relation to women's work and family conflict. *Trends in Undergraduate Research, 1*(1). <https://doi.org/10.33736/tur.1179.2018>
- Chakraborty, Abhinandita. (2023). Exploring the root causes of examination anxiety: effective solutions and recommendations. *International Journal of Science and Research (IJSR), 12*. 1096-1102. doi: 10.21275/SR23220002911
- Chen, Y., Pan, L., Lu, F., Sun, D., Liao, C., & Na, M. (2025). Psychological detachment in Chinese higher education: A multitheoretical model of academic stress, cultural pressure, and coping resources. *Frontiers in Psychology, 16*, 1647184. <https://doi.org/10.3389/fpsyg.2025.1647184>
- Desai, Tanmayi, Sathiyaseelan, & Anuradha. (2020). Role of parent's education, occupation in parental pressure and adolescents' test anxiety. *Bioscience Biotechnology Research Communications, 13*. doi: 10.21786/bbrc/13.1/47.
- Driscoll, R. (2007). Westside Test Anxiety Scale Validation. *American Test Anxiety Association*. Retrieved from <https://files.eric.ed.gov/fulltext/ED495968.pdf>
- Elvira-Zorzo, M. N., Gandarillas, M. Á., & Martí-González, M. (2025). Psychosocial Differences Between Female and Male Students in Learning Patterns and Mental Health-Related Indicators in STEM vs. Non-STEM Fields. *Social Sciences, 14*(2), 71. <https://doi.org/10.3390/socsci14020071>

- Govindarajoo, Vasugi & Aboudahr, Shorouk & Yee, Cheong. (2023). A case study on the implementation of collaborative learning in the Malaysian lower secondary classroom Mallika. *International Journal of Academic Research in Progressive Education and Development*. 12. doi: 10.6007/IJARPED/v12-i2/16826.
- Lee, Y.-J. (2022). Lingering male breadwinner norms as predictors of family satisfaction and marital instability. *Social Sciences*, 11(2), 49. <https://doi.org/10.3390/socsci11020049>
- Li, D., Ahmad, N. A., & Roslan, S. (2025). Perceived social support from parents, teachers, and friends as predictors of test anxiety in Chinese final-year high school students: The mediating role of academic buoyancy. *Behavioral Sciences*, 15(4), 449. <https://doi.org/10.3390/bs15040449>
- Li, X. (2025). The impact of secondary school students' perceptions of parental academic involvement and academic stress on internalizing problem behaviors: The mediating roles of psychological resilience and materialism. *Frontiers in Psychology*, 16, 1582493. <https://doi.org/10.3389/fpsyg.2025.1582493>
- Lu, K., Zhu, J., Pang, F., & Liu, Z. (2024). Understanding college students' test anxiety in asynchronous online courses: the mediating role of emotional engagement. *International Journal of Educational Technology in Higher Education*, 21(1), 50. <https://doi.org/10.1186/s41239-024-00482-1>
- Mazer, J. P., & Thompson, B. (2011). The validity of the student academic support scale: Associations with social support and relational closeness *Communication Reports*. 24 (2), 74-85. doi: 10.1080/08934215.2011.622237
- Miao, C., & Zhang, S. (2024). The cross-cultural adaptation of Chinese international students: An empirical study on sequential-mediated effects. *Frontiers in Psychology*, 15, 1386044. <https://doi.org/10.3389/fpsyg.2024.1386044>
- Núñez-Peña, María, P., Suarez, P., Macarena, R., & Bono, R., (2016). Gender Differences in Test Anxiety and Their Impact on Higher Education Students' Academic Achievement. *Procedia - Social and Behavioral Sciences*. 228. 154-160. 10.1016/j.sbspro.2016.07.023.
- Ortega-Donaire, L., Álvarez-García, C., López-Franco, M. D., & Sanz-Martos, S. (2023). Effectiveness of guided breathing and social support for the reduction of pre-exam anxiety in university students: A factorial study. *Healthcare*, 11(4), 574. <https://doi.org/10.3390/healthcare11040574>

- Putwain, D. W., Stockinger, K., Embse, N. P. V. D., Suldo, S. M. & Daumiller, M. (2021). Test anxiety, anxiety disorders, and school-related wellbeing: Manifestations of the same or different constructs? *Journal of Psychology School*. 88. (pg 47-67). doi: 10.1016/j.jsp.2021.08.001
- Ryff, C. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069–1081.
- Samri, M. Z., & Jumaat, N. F. (2024). Online collaborative learning approach for Malay language learning and its impact on students' achievement. *Sains Humanika*, 16(2), 85–91. <https://doi.org/10.11113/sh.v16n2.2139>
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763–1768. <https://doi.org/10.1213/ANE.000000000000286>
- Steinmayr, R., Crede, J., McElvany, N., & Wirthwein, L. (2016). Subjective well-being, test anxiety, academic achievement: Testing for reciprocal effects. *Frontiers in Psychology*, 6. doi: 10.3389/fpsyg.2015.01994
- Talwar, P., Matheiken, S., & Cheng, J., & Sabil, S. (2019). Reliability and Factor Structure of the Westside Test Anxiety Scale among University Students. *Online Journal of Health and Allied Sciences*. 18. <https://www.ojhas.org/issue71/2019-3-8.html>
- Tang, B. (2023). Correlations and Gender Differences between Self-efficacy and Test Anxiety in University Students. *Journal of Education and Educational Research*, 4(2), 145-149. <https://doi.org/10.54097/jeer.v4i2.10846>
- Tang, X. L. (2024). The impact of school climate on academic burnout of Chinese students: The mediating effect of psychological capital. *Frontiers in Education*, 9, 1346347. <https://doi.org/10.3389/feduc.2024.1346347>
- Tang, Y.-Y., Tang, R., & Gross, J. J. (2019). Promoting psychological well-being through an evidence-based mindfulness training program. *Frontier Human Neuroscience*. 13 (237). doi: 10.3389/fnhum.2019.00237
- Tengku Mohamed Fauzi, T. N. L., Yusoff, M. S. A., & Ramli, N. F. M. (2024). Mitigating respondent fatigue in self-assessment: CEFR-based items for Malaysian undergraduates. *Journal of Nusantara Studies (JONUS)*, 9(2), 474-489
- Thompson, B., & Mazer, J. P. (2009). College student ratings of student academic support: Frequency, importance, and modes of communication. *Communication Education*, 58(3), 433-458. doi: 10.1080/03634520902930440

- Wong, S. S., Wong, C. C., Ng, K. W., Bostanudin, M. F., & Tan, S. F. (2023). Depression, anxiety, and stress among university students in Selangor, Malaysia during COVID-19 pandemics and their associated factors. *PloS one*, *18*(1), e0280680. doi: 10.1371/journal.pone.0280680
- Worsley, J. D., Pennington, A., & Corcoran, R. (2022). Supporting mental health and wellbeing of university and college students: A systematic review of review-level evidence of interventions. *PloS one*, *17*(7), e0266725. doi: 10.1371/journal.pone.0266725
- Yang, Y., & Wang, S. (2023). The relationship between exam anxiety, academic performance and peer support among 9th grade students in Shenzhen, China. *Curriculum & Innovation*, *1* (1), 5-11. doi: 10.61187/ci.v1i1.16
- Yatkin, E., Aral, N., Gunes, L. C., & Tosun, S. (2023). Mental well-being and test anxiety among students preparing for the university admission exam during the pandemic. *Frontiers in Psychology*, *14*. doi:10.3389/ fpsyg.2023.1184788
- Zhu, Y., Lu, H., Wang, X., Ma, W., & Xu, M. (2025). The relationship between perceived peer support and academic adjustment among higher vocational college students: The chain mediating effects of academic hope and professional identity. *Frontiers in Psychology*, *16*, 1534883. <https://doi.org/10.3389/fpsyg.2025.1534883>
- Zimmer-Gembeck, M. J., Skinner, E. A., Scott, R. A., Ryan, K. M., Hawes, T., Gardner, A. A., & Duffy, A. L. (2023). Parental support and adolescents' coping with academic stressors: A longitudinal study of parents' influence beyond academic pressure and achievement. *Journal of Youth and Adolescence*, *52*(12), 2464–2479. <https://doi.org/10.1007/s10964-023-01864-w>