



Performance Anxiety and Academic Stress among Psychology Students: An Exploratory Study

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Abstract

This study aimed to determine the level of performance anxiety and academic stress among second-year psychology students at the University of Bejaia, as well as to examine the relationship between these two variables. To achieve this, a quantitative method was used, adopting a descriptive and correlational design, based on two measurement instruments, namely the Test Anxiety Inventory and the Perceived Stress Scale.

The results of the study showed that students exhibited a moderate level of performance anxiety as well as a moderate level of academic stress. The findings also revealed a statistically significant positive correlation between performance anxiety and academic stress.

Keywords: Performance anxiety; Academic stress; Students; Psychology students

Résumé

Cette étude avait pour objectif de déterminer le niveau d'anxiété de performance et de stress scolaire chez les étudiants de deuxième année en psychologie de l'Université de Bejaia, ainsi que d'examiner la relation entre ces deux variables. Pour ce faire, une méthode quantitative a été utilisée, adoptant une approche descriptive et corrélative, sur la base

de deux instruments de mesure, à savoir l'Inventaire d'anxiété face aux examens et l'Échelle de stress perçu.

Les résultats de l'étude ont montré que les étudiants présentaient un niveau modéré d'anxiété de performance ainsi qu'un niveau modéré de stress scolaire. Les résultats ont également révélé une corrélation positive statistiquement significative entre l'anxiété de performance et le stress scolaire.

Mots-clés : Anxiété de performance ; Stress scolaire ; Étudiants ; Étudiants en psychologie



Introduction

Performance anxiety is a key variable in understanding the psychological functioning of students. It can be defined as an emotional reaction characterized by feelings of tension, worry, and apprehension in evaluative situations.

According to Spielberger (1983), anxiety is conceptualized as a temporary emotional condition characterized by heightened physiological arousal, the intensity of which fluctuates in response to situations perceived as threatening. Within the academic context, this form of anxiety predominantly emerges in circumstances involving evaluative performance, such as examinations, oral presentations, and other assessment-related situations.

The concept of performance anxiety is closely related to test anxiety, which has been widely studied in the scientific literature. Zeidner (1998) emphasizes that this form of anxiety occurs when individuals perceive a situation as threatening to their self-esteem or performance. Thus, students with high levels of anxiety tend to anticipate failure, doubt their abilities, and experience difficulties in mobilizing their cognitive resources in evaluative situations.

Performance anxiety can have significant consequences on students' academic and psychological functioning. Indeed, it is often associated with difficulties in concentration, reduced performance, and an increase in perceived stress. According to Putwain (2007), students with high levels of test anxiety report greater emotional distress and higher levels of academic stress. Furthermore, recent research indicates that anxiety associated with academic situations may directly

impair cognitive functioning and decision-making processes, consequently exacerbating academic difficulties.

The university environment represents an important transitional period characterized by numerous academic and psychosocial demands. In this regard, Beiter et al. (2015) indicate that university students are frequently exposed to high levels of stress, anxiety, and psychological distress during their studies. Indeed, this period involves significant changes in living conditions, responsibilities, and expectations, which can constitute an important source of pressure. Academic stress likewise constitutes a fundamental dimension of students' educational experience and may exert considerable effects on their overall well-being and functioning. It may be defined as the range of psychological and physiological responses manifested by individuals when confronted with the demands and pressures associated with their academic environment.

According to Cohen et al. (1983), perceived stress refers to the subjective evaluation of situations as unpredictable, uncontrollable, or exceeding personal resources. In the university context, this stress is often associated with workload, examinations, time constraints, and academic achievement expectations.

More recent research also shows that this stress can reduce motivation, affect learning abilities, and increase the risk of academic difficulties (Pascoe et al., 2020). Thus, academic stress remains a central dimension of students' experience and can have significant implications for well-being and overall functioning.

Academic demands may likewise contribute to adjustment difficulties among students. Indeed, numerous studies have demonstrated that students are frequently subjected to



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substantial pressures associated with academic performance and achievement, which can consequently lead to elevated levels of stress and various psychological difficulties. These difficulties may manifest as reduced motivation, emotional disturbances, and impaired cognitive functioning, particularly in attention and concentration. Moreover, recent studies indicate that academic stress is highly prevalent, with a significant proportion of students reporting moderate to high levels of stress.

Psychology students represent a particularly relevant population for the study of these variables. Indeed, their training involves not only significant academic demands but also an emotional engagement related to the understanding of psychological processes and human-related issues. In this regard, some research shows that students enrolled in demanding academic programs present high levels of stress and anxiety, which may affect their well-being and adaptation.

A large number of studies have highlighted the existence of a relationship between academic stress and anxiety among students. For instance, Pascoe et al. (2020) showed that high levels of stress are associated with increased anxiety disorders, sleep disturbances, and impaired psychological well-being. Similarly, other recent studies confirm that academic stress and anxiety are strongly correlated and represent major factors of psychological vulnerability among students.

Moreover, Beiter et al. (2015) identified anxiety as one of the main factors contributing to perceived stress among university students. In particular, performance anxiety may amplify the perception of academic demands as threatening,

leading to increased perceived stress. In turn, high levels of stress may reinforce anxious manifestations, creating a vicious cycle between these two variables.

However, although the scientific literature has extensively examined stress and anxiety in general, relatively few studies have specifically focused on the relationship between performance anxiety and academic stress among psychology students, particularly within specific university contexts. This gap highlights the need to further investigate these variables in targeted populations.

In light of these elements, it appears relevant to examine the relationship between performance anxiety and academic stress among psychology students in order to better understand the psychological mechanisms involved in their academic experience. It would therefore be of interest to determine the nature of the relationship between these two variables.

Research Questions

- What is the level of performance anxiety among psychology students?
- What is the level of academic stress among psychology students?
- Is there a correlation between performance anxiety and academic stress among psychology students?

Hypotheses

- Psychology students exhibit a moderate level of performance anxiety.
- Psychology students exhibit a moderate level of academic stress.



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- There is a statistically significant positive correlation between performance anxiety and academic stress among psychology students.

1. Method and Instruments

To conduct this study, a quantitative method was adopted. The quantitative approach deals with numerical data (Ionescu, 2013). Such data allow for descriptive analyses, tabulations, and statistical analyses aimed at examining relationships between variables or factors, including correlation or association analyses (N' da, 2015).

Within this framework, a descriptive and correlational design was employed. This approach makes it possible, through statistical analyses, to describe the characteristics of the sample as well as the scores obtained on the performance anxiety and academic stress scales, and to examine the relationship between these two variables.

The sample consisted of 120 second-year psychology students enrolled at the University of Bejaia, including 90 females and 30 males. The mean age of the sample was 21 years ($SD = 0.58$), with ages ranging from 20 to 22 years.

Inclusion and exclusion criteria were defined to select the participants. As an inclusion criterion, students were required to be enrolled in the second year of psychology. The main exclusion criterion was enrollment in any other academic level.

Second-year psychology students represent a particularly relevant population for the study of performance anxiety and academic stress. At this stage of their training, they are confronted with more specialized academic assessments and increased academic demands, which may generate specific

exam-related anxiety and higher levels of academic stress (Misra & McKean, 2020).

Their recruitment therefore allows for a reliable examination of the relationship between these two variables within a representative academic context, while ensuring that participants possess the necessary skills to understand and respond to the measurement scales used.

In this study, data were collected using the Test Anxiety Inventory developed by Spielberger (1980) to assess performance anxiety, as well as the Perceived Stress Scale developed by Cohen et al. (1983) to measure academic stress.

The Test Anxiety Inventory (Spielberger, 1980) is a questionnaire designed to assess performance anxiety in individuals. This scale consists of 20 items measuring the level of anxiety experienced in academic evaluation situations. Responses are generally rated on a Likert-type scale, allowing for the quantification of anxiety intensity.

Several studies have confirmed the good psychometric properties of this instrument. For instance, a study on the Test Anxiety Inventory demonstrated that the scale has a coherent structure and high reliability indices, supporting its validity for use with university students (Dominguez-Lara, 2016). Similarly, other studies have reported a stable factorial structure and good internal consistency, confirming its psychometric robustness (Shabbir & Mohsin, 2013).

More recent research has also confirmed the validity and reliability of shortened versions of the Test Anxiety Inventory, particularly among student populations, showing that this tool remains relevant for assessing performance anxiety across different cultural contexts (Kösters et al., 2023). For the present study, the French version of the scale was used.



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The Perceived Stress Scale is a questionnaire designed to measure the level of perceived stress in individuals based on their appraisal of life situations (Cohen et al., 1983). The most commonly used version of this scale consists of 10 items (PSS-10) and is widely employed in psychological research to assess stress across various contexts, particularly academic settings (Roberti et al., 2006).

Several studies have confirmed the strong psychometric properties of this instrument. For example, one study showed that the 10-item version of the Perceived Stress Scale demonstrates good internal consistency, with Cronbach's alpha coefficients generally exceeding 0.70, as well as a stable factor structure (Lee, 2012). Similarly, other research has confirmed the validity and reliability of this scale across different populations, including students, thereby supporting its use in academic contexts (Roberti et al., 2006).

Further studies have also shown that the Perceived Stress Scale maintains good psychometric properties across diverse cultural contexts, confirming its robustness and relevance for measuring perceived stress among students (Andreou et al., 2011).

Thus, the Perceived Stress Scale represents a reliable and valid instrument for assessing perceived stress. For the present study, the French version of the scale was used.

The questionnaires were administered online via Google Forms and were accessible only to participating students after receiving the link through institutional email. Participants submitted their responses anonymously.

Regarding the statistical analysis of the quantitative data, it was carried out using the Statistical Package for the Social Sciences (SPSS, version 20.0). Descriptive analyses were

conducted to present the sociodemographic characteristics of the sample, as well as the scores obtained on the Test Anxiety Inventory and the Perceived Stress Scale. Subsequently, correlational analyses were performed to examine the relationship between academic stress and performance anxiety, using Pearson's correlation coefficient (r).

2. Results and Discussion

2.1. Presentation and Analysis of Results

2.1.1. Results on the Scales

The results presented below provide a description of the scores obtained on the Test Anxiety Inventory and the Perceived Stress Scale.

- **Results on the Test Anxiety Inventory**

As shown in Table 1, the mean score obtained by all participants ($n = 120$) on the Test Anxiety Inventory is 128, indicating a moderate level of performance anxiety. The standard deviation is 15.

Table 1: Mean score and standard deviation of participants on the Test Anxiety Inventory

Mean score	Standard deviation
128	15

Source: Our survey

Based on the existing literature, the scores of the Test Anxiety Inventory were classified into three levels: a score ranging from 20 to 35 is interpreted as low performance anxiety, a score from 36 to 55 as moderate anxiety, and a score



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from 56 to 80 as high or very high anxiety (Al Doughmi et al., 2006).

In our sample, the calculation of frequencies and percentages according to these levels allowed the division of the sample into three groups: 24 participants (20%) obtained scores indicating low performance anxiety; 84 participants (70%) showed moderate anxiety; and 12 participants (10%) obtained scores reflecting high performance anxiety.

Thus, it can be concluded that the majority of participants exhibit a moderate level of performance anxiety, which represents an important finding for understanding emotional difficulties among psychology students.

- **Results on the Perceived Stress Scale**

As shown in Table 2, the mean score obtained by all participants ($n = 120$) on the Perceived Stress Scale is 20.1, indicating a moderate level of stress. The standard deviation is 5.0.

Table 2: Mean score and standard deviation of participants on the Perceived Stress Scale

Mean score	Standard deviation
20,1	5,0

Source: Our survey

According to the empirical interpretation guidelines established for the Perceived Stress Scale (PSS-10), scores

were classified into three distinct levels: scores ranging from 0 to 13 reflect low perceived stress, scores between 14 and 26 indicate moderate perceived stress, whereas scores from 27 to 40 correspond to high perceived stress. This classification, which is widely employed in the scientific literature, provides a framework for interpreting the results obtained within our sample (Cohen et al., 1983).

In our sample, the calculation of frequencies and percentages according to the levels of the Perceived Stress Scale (PSS-10) allowed the division of participants into three groups: 24 participants (20%) obtained scores indicating low perceived stress (0-13); 78 participants (65%) showed moderate stress (14-26); and 18 participants (15%) obtained scores reflecting high stress (27-40) (Cohen et al., 1983; Anwer et al., 2020).

Thus, it can be concluded that the majority of participants exhibit a moderate level of perceived stress, which represents an important finding for understanding emotional responses and vulnerability to academic stress among psychology students.

2.1.2. Correlation between Performance Anxiety and Perceived Stress

The results presented below aim to describe the relationships between the variables of interest examined in this study:

**Table 3: Correlation between Performance Anxiety and Perceived Stress**

	Perceived Stress
Performance Anxiety	0,50 p<0,0 1

**The correlation is significant at the 0.01 level.

Source: Our survey

The results obtained from Pearson's correlation coefficient analysis revealed that performance anxiety (total scale score) is positively and significantly correlated with perceived stress (total scale score) ($r = 0.50$; $p < 0.01$) in the study sample. This correlation can be described as strong ($r > 0.5$) (Table 3).

In light of these results, it can be concluded that the higher the level of performance anxiety, the higher the level of perceived stress among psychology students.

2.2. Discussion of the Results

After presenting and analyzing the results of this study, we now discuss them in relation to the hypotheses.

2.2.1. Discussion of the First Hypothesis: Psychology students exhibit a moderate level of performance anxiety

The statistical analysis of the data obtained through the Test Anxiety Inventory made it possible to address this research question. Within our sample, 24 students demonstrated a low level of performance anxiety, 84

exhibited a moderate level, and 12 presented a high level of performance anxiety. These findings therefore support and confirm our research hypothesis.

Our results are consistent with those of Cassady (2004), who highlighted the presence of moderate to high levels of performance anxiety among university students, showing that test-related anxiety is a common and significant variable in academic contexts. Indeed, students generally present anxiety levels ranging from moderate to high depending on academic demands.

Our findings are also consistent with those of Von der Embse et al. (2018), who, through a meta-analysis of several studies, demonstrated that performance anxiety is widely prevalent among students and is most often at a moderate to high level. Thus, these studies confirm that performance anxiety is a frequent experience among students, with a predominance of moderate to high levels.

2.2.2. Discussion of the Second Hypothesis: Psychology students exhibit a moderate level of academic stress.

Statistical analysis of the data obtained from the Perceived Stress Scale allowed us to address this question. In our sample, 24 students showed a low level of perceived stress; 78 students showed a moderate level of perceived stress; and 18 students showed a high level of perceived stress. We therefore confirm our hypothesis.

Our results are consistent with those of Cohen et al. (1983), who highlighted that perceived stress is a common experience in the general population, particularly among students, with levels generally ranging from moderate to high. Indeed, academic demands, examinations, and time



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constraints contribute to increased perceived stress in university contexts.

Our findings are also consistent with those of Anwer et al. (2020), who showed in a study conducted among university students that the majority of participants reported moderate levels of perceived stress, with a considerable proportion experiencing high levels. Thus, these studies confirm that academic stress is a common reality among students, mainly characterized by moderate to high levels.

2.2.3. Discussion of the Third Hypothesis:

There is a significant positive correlation between performance anxiety and academic stress among psychology students. (In other words: the higher the level of performance anxiety, the higher the level of academic stress.)

The calculation of Pearson's correlation coefficient revealed a strong positive correlation between performance anxiety and academic stress in our sample. We therefore confirm our hypothesis.

Our results are consistent with those of Cassady (2004), who showed that performance anxiety is closely related to stress responses among students, particularly in academic evaluation situations. Indeed, students with high levels of test anxiety tend to perceive academic situations as more stressful, reflecting a positive relationship between these two variables.

Our findings are also consistent with those of Putwain (2007), who highlighted that test-related anxiety is significantly associated with academic stress, showing that students who experience anxiety in evaluative situations

develop emotional and cognitive responses similar to those observed in stress reactions. Thus, these studies confirm the existence of a significant positive relationship between performance anxiety and academic stress, which supports the results obtained in our study.

Conclusion

In conclusion, this study aimed to examine performance anxiety and academic stress among psychology students, as well as the relationship between these two variables. The results showed that students generally exhibit moderate levels of both performance anxiety and academic stress.

Furthermore, the correlational analysis revealed a significant positive relationship between these two variables, indicating that an increase in performance anxiety is associated with an increase in academic stress.

These findings are consistent with the literature, which highlights the frequent presence of emotional difficulties among students facing academic demands. They also emphasize the importance of considering these psychological dimensions in the academic context, particularly by developing preventive and supportive strategies aimed at reducing anxiety and stress.

However, this study has some limitations, including the relatively small and specific sample size, which limits the generalizability of the results. Therefore, future research should consider larger samples and explore other variables that may influence performance anxiety and academic stress.



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