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# **EXPLORING PERCEIVED STRESS AND ANXIETY LEVELS WHILE TRAVELING AMONG UNDERGRADUATE STUDENTS: A CASE STUDY IN VIETNAM**

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## **Abstract**

Stress and anxiety are common mental health problems among undergraduate students. This study investigated the level of stress and anxiety among undergraduate students during their travel. The study used a survey method using questionnaires and statistical data analysis. Using a convenient selection method, 308 college students who had traveled in the past year were analyzed. The results of the study showed that undergraduate students had similar levels of stress and anxiety during their travel. There was a positive correlation between students' stress and anxiety during their travel. There was no significant statistical difference in gender or year of study regarding perceived stress and anxiety during travel. College students who frequently traveled to escape pressure purposes felt less stressed about their abilities. Studies in the future can further investigate this by directly researching the context of travel in terms of time, frequency, or with specific goals.

## **Keywords**

Traveling, Perceived Stress, Anxiety, Undergraduate Students

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## **Introduction**

Stress and anxiety are the most common mental health problems. They can cause different effects on the body based on intensity and severity. Chronic anxiety and stress have been shown to cause health problems, illness, negative mood, social disconnection, and inhibition of healthy lifestyle behaviors (Schneiderman et al., 2005; Moser, 2007). Therefore, research on stress and anxiety has always received much attention from researchers.

Studies on stress and anxiety on different subjects and in different contexts are also different. Many studies show that the level of stress and anxiety of health university students in the context of the COVID-19 pandemic is at a moderate to high level (Alayadi et al., 2024; Do Nam Khanh et al., 2024). Especially students who practice directly in hospitals in the context of COVID-19 (Do Quang Tuyen, 2022). In particular, students often feel more stressed than anxious. In contrast, the stress and anxiety levels of university students in normal contexts tend to be much lower (Anwer et al., 2020, Le Thi Huong, 2024).

Some studies show the positive impact of travel on mental health problems such as depression (Levi et al, 2018), stress (Buckley, 2020), well-being (Smith & Diekmann, 2017) or physical health (Godovykh & Ridderstaat, 2020). Meta-analysis studies also show the important role of travel on mental health (Buckley & Cooper, 2022; Buckley, 2022). Frequent travel is believed to improve participants' mental health. Recent research has also highlighted the importance of travel, and health research in the tourism field is gradually gaining more attention (Wen et al, 2024). Therefore, this study hypothesizes that the level of mental health problems of students during travel will be lower.

This study aims to investigate perceived stress and anxiety levels, investigate the relationship between perceived stress and anxiety, and the statistical differences between some demographic variables of university students during travel. The study provides evidence in a broader context for these two mental health problems.

## Materials and Methods

### *Setting and participants*

The study used a non-probability, convenience sample. The selection criteria for the study were undergraduate students who had traveled within the past year. The questionnaire included an attention check question to filter out students who answered dishonestly during the survey. Students were asked to report their experiences of stress and anxiety while traveling within the past year. The study was conducted at the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City. The survey was collected online from students between November 1, 2024 and November 15, 2024. A total of 406 students reported having traveled within the past year. After eliminating inappropriate questionnaires, 308 students were suitable for further data analysis. The surveyed students included in terms of gender, 52 male students (16.9%), 253 female students (82.1%), 3 students selected other (1%); in terms of academic year, 180 first-year students (58.4%), 67 second-year students (21.8%), 34 third-year students (11.0%), 27 fourth-year students (8.8%); in terms of often traveling to escape the pressures of life, 123 students selected yes (39.9%), 185 students selected no (60.1%).

### *Instruments*

The study used a questionnaire survey method and statistical data processing methods. The variables were measured as follows: Perceived stress was measured using the perceived stress scale of Cohen et al. (1983), Vietnamese version of Thai Thanh Truc and Nguyen Vo Phuong Trang (2019). The perceived stress scale is believed to be able to measure the unpredictable, uncontrollable and overloaded experience of individuals in life. The scale was adapted to measure the level of stress during travel (Eg: *While traveling, how often have you been upset because of something that happened unexpectedly?*). The scale was proposed to be measured in 2 components by Roberti et al (2006) to be more comprehensive. Cronbach's Alpha analysis showed that the most consistent reliability coefficient of the scale was good in both subscales: Perceived helplessness (Cronbach's Alpha=0.788) and Perceived self-efficacy (Cronbach's Alpha=0.631) with item-total correlation coefficients above 0.3. Exploratory factor analysis showed that the KMO coefficient= 0.774 ( $p < 0.05$ ), stress was measured by two factors with 0.5 factor loadings: Perceived helplessness (Factor 1 - Items 1, 2, 3, 6, 9, 10) and Perceived self-efficacy (Factor 2: Items 4, 5, 7, 8). The items of factor 2 were all reversed scored. The higher the total score, the more stressed the students felt. The level of anxiety was measured by the generalized anxiety disorder scale of Spitzer et al. (2006), the Vietnamese version of Nguyen Cong Bang et al. (2022). The generalized anxiety disorder scale is believed to be able to measure the manifestations of generalized anxiety disorder. The Likert scale options were adjusted to measure the level of anxiety during travel: 0/ Not at all, 1/ Several traveling days, 2/ More than half the traveling days, 3/ Nearly every traveling day. Cronbach's Alpha analysis showed that the most consistent reliability coefficient of the scale was good (Cronbach's Alpha = 0.853). Exploratory factor analysis showed that the KMO coefficient = 0.864 ( $p < 0.05$ ), anxiety has only one dimension at 0.5 factor loadings. The higher the total score, the more anxious the student feels.

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### *Data Analysis*

Of the 406 respondents, 81 respondents answered the attention questions incorrectly (e.g. Attention question, when you see this question, choose option 1) and were not used for analysis. In addition, 17 students who had travel experience after 1 year were also eliminated. The study used SPSS 20.0 software to analyze the data. The actual

data were obtained by using frequency analysis, mean score, standard deviation, and Skewness and Kurtosis indexes. Pearson correlation analysis was used to investigate the correlation between perceived stress and anxiety. The study used independent-sample T-Test and Oneway-ANOVA to investigate the statistical differences between the variables of gender, year of study, and often traveling to relieve stress. In which, the gender variable only analyzed the difference between men and women, because the number of students choosing other options was too small.

## Result

The results of the 308 survey responses showed that students had lower levels of stress and anxiety than the average. In general, students participating in this survey did not feel too stressed or anxious during the trip. More specifically, Table 1 shows the anxiety status of students. The anxiety level of students during the trip was very low ( $M=3.39$ ) with a low standard deviation ( $SD=3.43$ ). This score is in the range of 0-5 according to Spitzer et al. (2006), meaning that most students did not experience anxiety during the trip. The Skewness and Kurtosis indices were both in the range of  $\pm 2$ , indicating that the data set had an approximately normal distribution. In particular, students tended to rate "Being so restless that it is hard to sit still" the lowest. Students felt "Worrying too much about different things" more.

Code	Items	Mean	S.D.	Skewness	Kurtosis
A1	Feeling nervous, anxious or on edge	0.578	0.62		
A2	Not being able to stop or control worrying	0.442	0.66		
A3	Worrying too much about different things	0.614	0.77		
A4	Trouble relaxing	0.481	0.68		
A5	Being so restless that it is hard to sit still	0.279	0.57		
A6	Becoming easily annoyed or irritable	0.533	0.69		
A7	Feeling afraid as if something awful might happen	0.464	0.7		
<b>Anxiety</b>		3.39	3.43	1.238	1.557

**Table 1: Descriptive of students' anxiety**

The results from Table 2 show that students' perceived stress is lower than the average ( $M=16.11$ ) with a low standard deviation ( $SD=5.65$ ). This shows that students did not encounter too many stress-related problems during the travel process. More specifically, the mean scores of Perceived helplessness ( $M=9.88$ ,  $SD=4.46$ ) and Perceived self-efficacy ( $M=6.23$ ,  $SD=2.52$ ) are quite low. This shows that students feel they can control their own problems and rarely experience overload during the travel process. The Skewness and Kurtosis indices of the representative points are all close to 0, indicating that the data set is normally distributed. In the dimension of "Perceived helplessness", students tend to agree more with frequent sudden upsets, but feel they can overcome difficulties. As for the "Perceived self-efficacy" aspect, students tend to feel less in control in situations, but can control their own frustration and stress.

Code	Items	Mean	S.D.	Skewness	Kurtosis
<b>Perceived helplessness</b>		<b>9.88</b>	<b>4.46</b>	<b>0.215</b>	<b>-0.184</b>
S1	While traveling, how often have you been upset because of something that happened unexpectedly?	2.05	1.08		
S2	While traveling, how often have you felt that you were unable to control the important things in your life?	1.78	1.04		
S3	While traveling, how often have you felt nervous and "stressed"?	1.31	1.06		
S6	While traveling, how often have you found that you could not cope with all the things that you had to do?	1.99	1.05		
S9	While traveling, how often have you been angered because of things that were outside of your control?	1.73	1.15		
S10	While traveling, how often have you felt difficulties were piling up so high that you could not overcome them?	1.03	1.02		

<b>Perceived self-efficacy</b>			
S4*	In the last month, how often have you felt confident about your ability to handle your personal problems?	1.63	0.92
S5*	In the last month, how often have you felt that things were going your way?	1.43	0.85
S7*	In the last month, how often have you been able to control irritations in your life?	1.36	0.97
S8*	In the last month, how often have you felt that you were on top of things?	1.82	0.91
<b>Perceived stress</b>		16.11	5.65 0.006 0.025

\*Inverted items have had their scores reversed

**Table 2: Descriptive of students' perceived stress**

Pearson correlation analysis was then performed to examine the correlation between perceived stress and anxiety of students during travel. The results showed that there was a fairly strong association between stress and anxiety during travel. Perceived helplessness had a fairly strong correlation with anxiety ( $r=0.562$ ,  $p<0.05$ ). Meanwhile, perceived self-efficacy had a weak correlation with anxiety ( $r=0.157$ ,  $p<0.05$ ).

<b>Varriables</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1	Perceived helplessness	1	0.254**	0.829**	0.562**
2	Perceived efficacy		1	0.752**	0.157**
3	Stress			1	0.474**
4	Anxiety				1

\*\* $p<0.01$

**Table 3: Pearson correlation results between students' anxiety and stress**

Comparing the statistical differences between gender, years of study and frequency of travel to escape stress showed that there were no differences between gender, years of study and perceived stress and anxiety among undergraduate students ( $p>0.05$ ). However, students who agreed with frequently traveling to escape daily pressures had lower levels of perceived self-efficacy than students who did not ( $p<0.01$ ). There were no differences in the other two variables regarding frequent travel to escape stress.

		<b>Perceived stress</b>				<b>Anxiety</b>	
		<b>Factor 1</b>		<b>Factor 2</b>			
		<b>Mean</b>	<b>S.D.</b>	<b>Mean</b>	<b>S.D.</b>	<b>Mean</b>	<b>S.D.</b>
<b>Gender</b>	Male	9.06	4.28	6.60	2.70	3.58	3.22
	Female	10.06	4.49	6.15	2.49	3.38	3.49
<b>Significant</b>		<b>P=0.141</b>		<b>P=0.248</b>		<b>P=0.701</b>	
<b>Year of study</b>	Freshman	9.63	4.51	6.36	2.71	3.36	3.35
	Sophomores	9.93	4.34	6.37	2.21	3.19	3.41
	Juniors	11.12	4.51	5.88	2.09	3.85	3.06
	Seniors	9.81	4.35	5.52	2.33	3.52	4.49
<b>Significant</b>		<b>P=0.366</b>		<b>P=0.327</b>		<b>P=0.829</b>	
<b>Often travel to escape pressure</b>	Yes	9.92	4.46	5.76	2.64	3.45	3.90
	No	9.85	4.47	6.56	2.39	3.35	3.10
<b>Significant</b>		<b>P=0.893</b>		<b>P=0.007</b>		<b>P=0.811</b>	

**Table 4: Comparison of mean differences between demographic variables**

### Discussion

The results of the study showed that students who traveled had lower levels of stress and anxiety than those who traveled during COVID-19 (Aslan et al., 2020; Alayadi et al., 2024). When compared to students who traveled during normal circumstances, students reported similar levels of stress but tended to have lower levels of anxiety (Anwer et al., 2020, Le Thi Huong, 2024). Our study found that students who traveled had similar levels of stress and lower levels of anxiety. Correlation analysis results showed that there were many similarities in the relationship between stress and anxiety in previous studies (Aslan et al., 2020). However, when examining the dimensions more

closely, it can be seen that lack of self-efficacy is not as strongly correlated with anxiety as perceived helplessness. The results showed no gender differences, which is similar to the study by Alayadi et al. (2023). Both studies found no statistical differences in stress and anxiety among students. The results of the study showed no differences in the level of stress and anxiety among students during travel and the school year, which is contrary to the findings of Mofatteh (2020) who showed that first-year students often experience challenges that require more effort, causing more stress and anxiety. This may be because the questions in this study focused on past levels of stress and anxiety, while the school year situation may change. In addition, the results of the variance analysis support Buckley and Cooper's (2022) suggestion that travel frequency can be increased to relieve stress. However, only stress related to self-efficacy has a difference. This was a question raised by Buckley (2023) about the duration and frequency of travel for improving mental health. Future studies can investigate the frequency, duration, and purpose of travel in improving stress.

This study also has several limitations. First, this is a retrospective study, which may have many confounding factors in the recall process of the subjects. Future studies can directly examine the level of stress and anxiety at tourist destinations. Second, the recall of travel is quite general, which has many different types and purposes. Future studies can screen students who travel with different purposes.

### **Conclusion**

The results of the study showed that students had similar levels of stress and low anxiety during their student travel. The correlation between stress and anxiety was similar to some previous studies. Students who frequently traveled for the purpose of escaping pressure felt less stressed about self-efficacy. Future studies could investigate this more deeply by directly researching the travel context in terms of time, frequency, and specific purposes.

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