

# University Student's Perception of Academic Stress and Coping Strategies

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## Abstract

*In the current research, the focus was to examine the perception of academic stress of university students in terms of academic stressors and their coping strategies concerning gender, employment status, and education level, and find the relationship between perception of academic stress and coping strategies. For this purpose two instruments were used; Perceptions of academic stress scale and Brief Cope. It was concluded that unemployed students' perception of academic stress was more severe than employed and that graduates use more emotion-focused strategies than undergraduates. There was a direct positive relationship between the perception of academic stress and coping strategies. Results can be used by counsellors and health care professionals for better insight into university students' stress and coping mechanisms.*

**Keywords:** *academic stress; perception of academic stress; university students; coping strategies*

## INTRODUCTION

University life is associated with demands that are related to stress, such as; maintaining overall good grades, time management, and deadlines. Students are met with many challenges and changes in their university life, including their desire for acceptance and independence, which can often become hard to balance. Emotions are negatively impacted by these changes hence stress level increases (Baqtayan, 2011). Stress leads to many problems in the life of the students. It affects their overall health as well. Many factors lead to mental stress including parent's expectations, and long study durations. To succeed in academics, stable mental health is very important (Kalra, et al., 2016). According to Kumaraswamy (2013), students are a very important asset for a nation and despite investing a lot in education, the majority of university students are suffering from psychological problems. Students' academic stress is much more today than it was over a decade ago. Academics are an integral part of a student's life and when they imagine themselves not being able to achieve their academic goals, they become anxious. The volume of material and meeting grade requirements

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are two of the many significant sources of stress (Hjeltnes, Binder, Moltu, & Dundas, 2015).

According to Cruwys, Greenaway, and Haslam (2015), though higher education is a time for cognitive development and personal growth it is also a very stressful time for many students. Stressed students are unable to score well in university, resulting in lower GPAs. Hence academic performance is affected. Students reporting a higher level of stress also endorse numerous negative effects related to mental and physical health (Leppink, et.al, 2016). Parental pressure plays a key role in increasing the stress level of university students. (Deb, Strodl, & Sun, 2015). Cohen, Janicki-Deverts, and Miller (2007) explained that stress develops when societal demands and expectations are increased, and when such demands are increased they ultimately exceed an individual's abilities to cope. Prolonged stress affects the development of physical diseases and negative emotional states such as depression and anxiety. Increase stress can lead to negative behaviour such as smoking, and illness such as insomnia. Spiridon and Karagiannopoulou (2015) identified various stressors of university-going students and concluded that educational pressure, employment, peer competition, less leisure time, fear of failure, and student-faculty relationships are the main stressors of university-going students.

According to Spiridon and Karagiannopoulou (2015), undergraduates are worried more than graduates when it comes to grades and academic success. For many students, the most significant source of stress is the pressure to perform well in tests or a study. Students are more concerned about their GPAs than their mental health because of the environment. Many students attach grades to their self-worth, they believe that a number on the sheet of paper defines them. Due to immense stress, students can begin to doubt their ability to compete. It is predicted that academic workload affects academic performance hence it cause stress. Academic workload is positively related to the stress level. As the academic workload increases, the stress level increases simultaneously, which, in turn, affects the academic performance of the students (Kausar, 2010). Students have their way to deal with different stressors. According to Pierceall and Keim (2007), there are positive and negative coping strategies. Strategies that focus on emotions are more effective than strategies focused on planning (Crego, Carrillo-Diaz, Armfield, & Romero, 2016). Women experience stress with more intensity than the other gender (Karaman, Lerma, Vela, & Watson, 2019; Pierceall & Keim, 2007; Ranasinghe, Wathurapatha, Mathangasinghe, & Ponnampereuma, 2017; Shaikh, et al., 2004). However in some research male students are reported to have higher academic stress (Alyami, et al., 2017; Prabu, 2015). Few researchers reported that students feel academic stress irrespective of their gender (Bedewy & Gabriel, 2015; Dada, Babatunde, & Adeleye, 2019). Females and males adopt different coping strategies. It was observed that female students were not content with their coping strategies (Shaikh, et al., 2004). According to Ranasinghe, Wathurapatha, Mathangasinghe, and Ponnampereuma (2017), students with higher job satisfaction have lower stress levels, however, students with lower job satisfaction have higher stress levels.

## **METHODOLOGY**

### ***Objective***

Obtaining a university degree is very crucial to acquire a desirable career and satisfied life. Attending university is a stressful event for students because it is a huge transition from college to university. Some students are unable to perform well academically because they cannot figure out how to cope with stress. Stress is very dangerous as both the mental and physical health of students is affected by it, so to remove stressors from their life, students come up with various coping strategies,

namely; constructive as well as harmful. Very few researches have been conducted so far in Pakistan to identify the perception of academic stress of university students other than those associated with the medical field. The study aimed to determine differences in perception of academic stress between male, female, employed, unemployed, graduates, and undergraduates' students. The other objective was to see if females and males, employed and unemployed students, and graduates and undergraduates students cope differently with academic stress and also to examine the relation of perception of academic stress with coping strategies.

The research questions are mentioned below:

- RQ1:** Are there any significant differences in perception of academic stress of University students with respect to gender, employment status, and education level?
- RQ2:** Are there any significant gender, employment, and education level differences in university students using three coping strategies (emotion-focused, problem focused, and dysfunctional)?
- RQ3:** Is there any correlation between perception of academic stress and three types of coping strategies (emotion-focused, problem-focused and dysfunctional) used by the students?

### ***Participants***

University students of Pakistan were the population from which the sample was drawn for the study. Specific university students of Karachi were the sample as per convenience. 263 students took part in the research. The sample provided proper insight into university students' academic stressors and the coping strategies adopted by them. Survey research is said to be the one in which respondents are sampled randomly as each individual has a known probability of being sampled (Sukamolson, 2007).

All the respondents were able to answer the demographic questions. As shown in Table 1, 264 participants took part in our research. Out of them 131 were males and 133 were females, making it almost 50% males and 50% females. 119 participants were employed, however, 145 were unemployed, such that 45% of participants were employed and 55% were unemployed. 104 participants were graduates, however, 160 were undergraduates, making it 39% graduates and 61% undergraduates.

**Table 1:** *Demographic statistics*

Variables	Frequency	Valid Percentage
<b>Gender</b>		
Male	131	50
Female	133	50
<b>Employment Status</b>		
Employed	119	45
Unemployed	145	55
<b>Education Level</b>		
Graduates	104	39
Undergraduates	160	61

## ***Instrument***

This research was conducted by distributing questionnaires to students and also with the help of Google Forms, as it is easily accessible and free. The response to surveys is automatically and neatly collected in Forms. The responses can be viewed in an Excel sheet as well (Google, n.d). 130 questionnaires were filled out by distributing them directly among students and 134 were filled out through Google Forms. Two separate questionnaires were used, that helped in assessing the perception of academic stress and coping strategies of participants. Initially, participants were asked some demographic questions, such as gender, employment status, and education level, this information helped the researcher in answering two research questions. Perception of Academic Stress Scale (Bedewy & Gabriel, 2015) was used for the first part. It is a questionnaire that helped in testing the stressors that students have experienced in their university life. The scale contained 18 items, which were divided into four subscales, namely; pressure to perform, perception of workload and examination, self-perception, and time restraint. Secondly, the Brief Cope scale (Carver, 1997) was used to assess the coping strategies used by the students. Brief Cope is a brief version of the Cope inventory, which has proven to be successful in health-related research. The Brief Cope helps examine coping strategies used in natural settings (Carver, 1997). There were 28 items, each item rated on a 5-point Likert scale. 28 items were divided into 14 dimensions; denial, acceptance, religion, active coping, use of the substance, humor, positive reframing, planning, self-blame, behavior disengagement, use of instrumental support, self-distraction, venting, and use of emotional support. The 14 dimensions were further divided into three dimensions; emotion-focused coping strategies, problem-focused coping strategies, and dysfunctional coping strategies. Emotion-focused strategies include emotional support, acceptance, positive reframing, religion, and humor. Problem-focused coping strategies include instrumental support, planning, and active coping. Dysfunctional coping strategies include self-distraction, behavioral disengagement, self-blaming, denial, venting, and substance use. A little change was made in one of the dimensions to make it more culturally relevant. Along with alcohol and drugs, respondents were asked if they use nicotine to cope with their stress. Both the instruments were very simple to read and were easily understandable.

To test the reliability of both instruments, Cronbach  $\alpha$  was applied. The alpha of Cronbach is used as an indicator for determining the measurement scale reliability of all items. Two instruments were used for this study, hence Cronbach  $\alpha$  helped to find out the reliability and internal consistency of both Perception of Academic Stress Scale and Brief Cope. In any case, the value of the Cronbach alpha is more than 0.6, and the statistical value of reliability is generally considered as good (Goforth, 2015). The Perception of Academic Stress Scale (PAS) containing 18 items was having high reliability ( $\alpha=0.817$ ). The BRIEF Cope scale containing 28 items showed higher reliability too ( $\alpha=0.893$ ). These results are shown in Table 2.

**Table 2:** *Reliability statistics*

	No. of Items	Cronbach's Alpha
Perception of Academic Stress Scale (PAS)	18	0.817
BRIEF Cope	28	0.893

## ***Procedure***

The collection of data started by sharing the link to the form. The link was posted on different pages on Facebook, the link was also shared through WhatsApp to invite participants to take part in the study. Along with sharing the link, questionnaires were distributed in some universities to

collect the responses. Participants were made well aware of the topic and nature of the study in a cover letter. Some demographic questions were asked followed by two questionnaires; the Perception of Academic Stress Scale (PAS) and the Brief Cope scale. It took approximately 10-15 minutes to complete the survey. Google Forms helped save the responses automatically, however, the researcher manually filled in a few responses collected from distributing questionnaires in universities. The link was made available for at least a month. After a given time, no responses were entertained. Participation was completely voluntary and the identity of each respondent was kept confidential.

### **Data analysis**

Two questionnaires were adopted to gather data. Three types of analysis procedures used were; Way ANOVA, Independent sample t-test, and Pearson correlation. One Way ANOVA and independent sample t-test were used for significant differences. The rationale of One Way ANOVA was that variance within groups and between groups could be found. The One-way ANOVA was utilized to compare the perception of academic stress of students based on their gender, employment status, and level of education. An independent sample t-test was used to compare three types of coping strategies with gender, employment status, and education level. Pearson Correlation analysis helped in finding the relationship between the perception of academic stress and the three types of coping strategies used by the students. The level of significance was 0.05.

## **RESULTS**

The objective of the study was to measure the extent to which stress perception, and strategies were related to gender, employment status, and education level. The relation between the perception of academic stress and coping strategies was identified. The results of the analysis and other relevant details are presented as follows:

To answer question 1, Way ANOVA was applied. The test indicated that there were no significant differences in perception of academic stress between males and females [ $F(1, 262) = 0.024, p=0.876$ ]. It also indicated that there were significant differences in perception of academic stress between employed and unemployed students [ $F(1, 262) = 5.320, p=0.022$ ]. One way ANOVA also indicated that there were no significant differences in perception of academic stress between undergraduates and graduates [ $F(1, 262) = 0.921, p = 0.338$ ], as shown in Table 3.

**Table 3: One Way ANOVA for academic stress**

	Sum of squares	Df	Mean Square	F	p
<b>Gender</b>					
Between Groups	0.007	1	0.007	0.024	0.876
Within Group	78.162	262	0.298		
<b>Employment Status</b>					
Between Groups	1.556	1	1.556	5.320	0.022
Within Group	76.616	262	0.292		
<b>Education Level</b>					
Between Groups	0.274	1	0.274	0.921	0.338
Within Group	77.898	262	0.297		

In order to find out the difference in perception of academic stress between employed and unemployed students, researcher focused on descriptive statistics. It showed that unemployed (M=3.35, SD = 0.55) students perception of academic stress was more severe than employed (M = 3.19, SD = 0.52) students, as shown in Table 4.

**Table 4:** Differences in mean of employed and unemployed students

	N	Mean	SD
Employed	119	3.19	0.52
Unemployed	145	3.35	0.55

To answer research question 2, nine independent sample t-tests were applied. Independent sample t-test revealed that there is no significant difference in emotion-focused strategies  $t(262) = -1.18, p = 0.24$  used by male (M=3.31, SD = 0.72) and female (M = 3.42, SD = 0.73) students. A test revealed that there is no significant difference in problem-focused strategies  $t(262) = -0.67, p = 0.50$  used by male (M = 4.72, SD = 1.10) and female (M = 4.82, SD = 1.19) students. There was no significant difference in dysfunctional coping strategies  $t(262) = 1.43, p = 0.15$  used by male (M = 2.79, SD = 0.80) and female (M= 2.65, SD = 0.77) students.

Fourth independent sample t-test revealed that there was no significant difference in emotion focused strategies  $t(262) = 0.57, p = 0.57$  used by employed (M=3.39, SD = 0.67) and unemployed (M = 3.34, SD = 0.77) students. It was also observed that there was no significant difference in problem-focused strategies  $t(262) = -0.79, p = 0.43$  used by employed (M= 4.83, SD = 1.04) and unemployed (M = 4.72, SD = 1.23) students. There was no significant gender difference observed in dysfunctional coping strategies  $t(262) = 0.45, p= 0.65$  used by employed (M = 2.74, SD = 0.80) and unemployed (M= 2.7, SD = 0.77) students. The seventh independent sample t-test revealed that there was a significant difference in emotion-focused strategies  $t(262) = 2.03, p = 0.04$  used by graduate (M=3.48, SD = 0.66) and undergraduate (M = 3.29, SD = 0.76) students. The mean value indicates that graduates use emotion-focused strategies more than undergraduates. However, there was no significant difference in problem-focused strategies  $t(262) = 1.16, p = 0.25$  used by graduate (M= 4.87, SD = 1.00) and undergraduate (M = 4.70, SD = 1.23) students. There was no significant gender difference observed in dysfunctional coping strategies  $t(262) = 0.46, p= 0.65$  used by graduate (M = 2.75, SD = 0.75) and undergraduate (M= 2.7, SD = 0.8) students. Overall it was observed that there was a mean difference that graduates use emotion-focused strategies more than undergraduates. Table 5 shows all independent sample t-test results.

**Table 5:** Independent sample t test

		Mean	SD	df	t	p
<b>Gender</b>						
<b>Emotion-focused Strategies</b>	Male	3.31	0.72	262	-1.18	0.24
	Female	3.42	0.73			
<b>Problem-focused Strategies</b>	Male	4.72	1.10	262	-0.67	0.50
	Female	4.82	1.19			
<b>Dysfunctional-Coping Strategies</b>	Male	2.79	0.80	262	1.43	0.15
	Female	2.65	0.77			
<b>Employment Status</b>						

<b>Emotion-focused Strategies</b>	Employed	3.39	0.67	262	0.57	0.57
	Unemployed	3.34	0.77			
<b>Problem-focused Strategies</b>	Employed	4.83	1.04	262	0.79	0.43
	Unemployed	4.72	1.23			
<b>Dysfunctional-Coping Strategies</b>	Employed	2.74	0.80	262	0.45	0.65
	Unemployed	2.7	0.77			
<b>Education level</b>						
<b>Emotion-focused Strategies</b>	Graduate	3.48	0.66	262	2.03	0.04
	Undergraduate	3.29	0.76			
<b>Problem-focused Strategies</b>	Graduate	4.87	1.00	262	1.16	0.25
	Undergraduate	4.70	1.23			
<b>Dysfunctional-Coping Strategies</b>	Graduate	2.75	0.75	262	0.46	0.65
	Undergraduate	2.70	0.81			

As observed in Table 5, it is clear that students use all sorts of coping strategies irrespective of their gender, employment status, and education level. However, through analysis, it was proved that graduates use emotion-focused strategies more than undergraduates.

To check the relationship and association between two or more variables, an Analysis of correlation was applied. The correlation value is usually between 1 and -1. The variables are said to be perfectly related if it is 1 or -1. If the value is zero that means variables are not related. If the correlation value is greater than one it means that the variables are directly related, and if it's less than one then the variables are inversely related. The correlation coefficient values for all four variables are analyzed in Table 6. The table shows that all variables have a positive relation with one another. Also, the correlation value is above 0.2 and below 0.5, which means that the variables have a weak positive relationship with one another. As all the variables are positively related to one another, it is safe to say that perceived academic stress is positively correlated with emotion-focused coping strategies, problem-focused coping strategies, and dysfunctional coping strategies.

**Table 6:** Correlation coefficient of all variables

	Perception of Academic Stress	Emotion-Focused coping strategies	Problem-Focused coping strategies	Dysfunctional coping strategies
Perception of Academic Stress	1	0.366**	0.283**	0.320**
Emotion-Focused coping strategies	0.366**	1	0.724**	0.371**
Problem-Focused coping strategies	0.283**	0.724**	1	0.258**
Dysfunctional coping strategies	0.320**	0.371**	0.258**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## DISCUSSIONS

The research examined the extent to which dependent variables; sources of academic stress and coping strategies were related to independent variables; gender, employment status, and education level. The aim was to analyze any correlation between the perception of academic stress and

coping strategies. The perception of academic stress was measured by asking questions related to academic stressors. Stressors include pressure to perform, perception of workload and examination, self-perception, and time restraint. The results revealed that there were no significant gender and education level differences in the perception of academic stress of university students. This means that male, female, employed, and unemployed students consider all the stressors equally. This result was supported by previous research that reported that as far as academic stress and its perception is concerned, there were no significant gender differences observed (Bedewy & Gabriel, 2015; Dada, Babatunde, & Adeleye, 2019). The result was also supported by Ickes, Brown, Reeves, and Zephyr (2015), as they concluded that there were no differences in stress levels among graduates and undergraduates. However, as per the findings, there were significant differences in the perception of academic stress of university students concerning employment status. Unemployed perceived academic stress with more severity than employed students. It was reported by Cox (2017), that level of perceived stress is significantly affected by the employment status of students.

The question related to this variable was to determine if there were any significant gender, employment, and education level differences in university students using three coping strategies. The coping strategies were classified into emotion-focused, problem-focused, and dysfunctional coping strategies. The results revealed that university students use emotion-focused, problem-focused, and dysfunctional coping strategies almost equally irrespective of their gender, employment status, and education level. However, graduates use more emotion-focused strategies than undergraduates. Emotion-focused strategies include emotional support, acceptance, positive reframing, religion, and humor. Commonly used coping strategies are positive reframing, acceptance, self-distraction, active coping, emotional support, and planning (Sreeramareddy, et al., 2007).

The researcher examined the relationship between two dependent variables; academic stressors and coping strategies. Coping strategies were divided into emotion-focused, problem-focused, and dysfunctional strategies. The variables had medium/moderate correlation with one another. Perceived academic stress was positively correlated with emotion-focused coping strategies, problem-focused coping strategies, and dysfunctional coping strategies. That is when the academic stress of students increases, they tend to adopt all sorts of coping strategies to cope with the stress. However, in past research, no significant difference is observed between the perception of academic stress and coping strategies (Brougham, Zail, Mendoza, & Miller, 2009). Some elements of coping strategies were positively related to perceived stress, such as; behavioral disengagement, denial, and venting, however, positive reframing was negatively related to perceived stress (Al-Sowigh, 2013). For this study, the researcher was not able to cater to many respondents, therefore the results were generalized to the population. In the future, research can be conducted with a large sample size including students from all over Pakistan. One very significant limitation was time, the data was collected on one occasion, and the current mood of students affected the results. Also, sometimes students don't fill out the questionnaire with all honesty, which hinder the results of the study.

## CONCLUSION

It was concluded from the analysis and thorough discussion that university students' perception of academic stress is almost the same irrespective of their gender, and education level, however, employment status brings about some change in the perception of academic stress. It was concluded that the unemployed perceive academic stress with more severity than employed students. Academic stressors include pressure to perform, perception of workload and examination, self-perception, and

time restraint. Secondly, students use multiple coping strategies to deal with their academic stress. Selection of coping strategies is not influenced by gender, education level, and employment status, however, graduates use more emotion-focused strategies, such as; emotional support, acceptance, positive reframing, religion, and humor than undergraduates. Thirdly, it was also concluded that when students were stressed, they used all sorts of coping strategies, that is; emotion-focused, problem-focused, and dysfunctional coping strategies. Problem-focused coping strategies include instrumental support, planning, and active coping. Dysfunctional coping strategies include self-distraction, behavioral disengagement, self-blaming, denial, venting, and substance use. The result suggests that students have a good understanding of academic stressors and coping mechanisms. The results can be used by counselors and health care professionals for better insight into university student's stress and coping mechanisms. Proper counseling can help students improve their academic performance.

## RECOMMENDATIONS

Based on the discussion and conclusion, the recommendation would be to conduct the same research on a larger scale so that the information regarding the perception of academic stress and coping strategies would help implement some policies by educational institutes to help students decrease their academic stress. It was also recommended to conduct future studies to find out why graduates use emotion-focused strategies more than undergraduates. It was also recommended to include more research questions about what coping strategies are used with a particular type of stressor. It was recommended to conduct future research by asking questions about stress levels and coping strategies and finding out their relationships with one another.

## REFERENCES

- Al-Sowaygh, Z. H. (2013). Academic distress, perceived stress and coping strategies among dental students in Saudi Arabia. *The Saudi Dental Journal*, 25(3), 97-105.
- Alyami, M., Melyani, Z., Al Johani, A., Ullah, E., Alyami, H., Sundram, F. . . . Henning, M. (2017). The impact of self-esteem, academic self-efficacy and perceived stress on academic performance: A cross-sectional study of Saudi psychology students. *European Journal of Educational Sciences*, 4(3), 51-68.
- Baqutayan, S. (2011). Stress and social support. *Indian Journal of Psychological Medicine*, 33(1), 29.
- Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The perception of academic stress scale. *Health Psychology Open*, 2(2). doi:2055102915596714
- Brougham, R. R., Zail, C. M., Mendoza, C. M., & Miller, J. R. (2009). Stress, sex differences, and coping strategies among college students. *Current Psychology*, 28(2), 85-97.
- Carver, C. S. (1997). You want to measure coping but your protocols too long: Consider the brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92-100.

- Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *JAMA*, 298(14), 1685-1687.
- Cox, S. (2017). Investigating Stress Levels and Coping Abilities amongst Employed College Students.
- Crego, A., Carrillo-Diaz, M., Armfield, J. M., & Romero, M. (2016). Stress and academic performance in dental students: The role of coping strategies and examination-related self-efficacy. *Journal of Dental Education*, 80(2), 165-172.
- Cruwys, T., Greenaway, K. H., & Haslam, S. A. (2015). The stress of passing through an educational bottleneck: A longitudinal study of psychology honours students. *Australian Psychologist*, 50(5), 372-381.
- Dada, J. O., Babatunde, S. O., & Adeleye, R. O. (2019). Assessment of academic stress and coping strategies among built environment undergraduate students in Nigerian higher education. *Journal of Applied Research in Higher Education*. 11(3), 367-378
- Deb, S., Strodl, E., & Sun, J. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. *International Journal of Psychology and Behavioral Sciences*, 5(1), 26-34.
- Goforth, C. (2015, November 16). Using and Interpreting Cronbach's Alpha. Retrieved from University of Virginia Library: <https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/> Google. (n.d.). Retrieved from [ww.Google.com: https://www.google.com/forms/about/](https://www.google.com/forms/about/)
- Hjeltnes, A., Binder, P.-E., Moltu, C., & Dundas, I. (2015). Facing the fear of failure: An explorative qualitative study of client experiences in a mindfulness-based stress reduction program for university students with academic evaluation anxiety. *International Journal of Qualitative Studies on Health*, 10(1), <https://www.tandfonline.com/doi/pdf/10.3402/qhw.v10.27990>.
- Ickes, M. J., Brown, J., Reeves, B., & Zephyr, P. M. (2015). Differences between Undergraduate and Graduate Students in Stress and Coping. *Californian Journal of Health Promotion*, 13(1), 13-25.
- Kalra, R., Mutalik, N., Vinod, A., Moni, S., Choudhari, S. B., Govind, S., & Bhogale, G. (2016). Perceived stress and coping profile of undergraduate medical students: A cross sectional study. *International Journal of Indian Psychology*, 4(1).
- Karaman, M. A., Lerma, E., Vela, J. C., & Watson, J. C. (2019). Predictors of academic stress among college students. *Journal of College Counseling*, 22(1), 41-55.
- Kausar, R. (2010). Perceived stress, academic workloads and use of coping strategies by university students. *Journal of Behavioural Sciences*, 20(1), 31-45.
- Kumaraswamy, N. (2013). Academic stress, anxiety and depression among college students- A brief review. *International Review of Social Sciences and Humanities*, 5(1), 135-143.
- Pierceall, E. A., & Keim, M. C. (2007). Stress and coping strategies among community college students. *Community College Journal of Research and Practice*, 31(9), 703-712.

- Prabu, P. S. (2015). A study on academic stress among higher secondary students. *International Journal of Humanities and Social Science Invention*, 4(10), 63-68.
- Ranasinghe, P., Wathurapatha, W. S., Mathangasinghe, Y., & Ponnampereuma, G. (2017). Emotional intelligence, perceived stress and academic performance of Sri Lankan medical undergraduates. *BMC Medical Education*, 17(41).
- Shaikh, B. T., Kahloon, A., Kazmi, M., Khalid, H., Nawaz, K., Khan, N. A., & Khan, S. (2004). Students, stress and coping strategies: A case of Pakistani medical school. *Education for Health*, 17, 346-353.
- Spiridon, K., & Karagiannopoulou, E. (2015). Exploring relationships between academic hardiness, academic stressors and achievement in university undergraduates. *Journal of Applied Educational and Policy Research*, 1(1).
- Sreeramareddy, C. T., Shankar, P. R., Binu, V., Mukhopadhyay, C., Ray, B., & Menezes, R. G. (2007). Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal. *BMC Medical Education*, 7(26).
- Sukamolson, S. (2007). *Fundamentals of quantitative research*. 1, 2-3.