

Teacher-Induced Academic Stress: Predicting Eating Behavior Problems in College Students

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Abstract:- This study aimed to investigate the influence of academic stress on the eating behavior problems of 297 college students at San Agustin Institute of Technology during the second semester of the academic year 2022-2023. The researchers employed a quantitative approach using a descriptive-correlational research design. Specifically, this study determined the level of academic stress and the level of eating behavior problems of the respondents; examined if academic stress has a significant relationship with eating behavior problems; and investigated the influence of academic stress on the eating behavior problems of college students. The researchers adapted a questionnaire from the Survey of College Academic Stressors (SCAS) which was administered to measure stress-related academic factors while eating behavior was assessed using the Adult Eating Behavior Questionnaire (AEBQ). These two questionnaires were validated and reliability-tested with a Cronbach's alpha of .972, which means reliable. Frequency count and percentage, mean, standard deviation, Pearson r product-moment correlation analysis, and multiple regression analysis were used to treat the data. The results indicated that the level of academic stress experienced by the college students is "moderate" while their level of eating behavior problems is "high". The results further revealed that respondents' academic stress is associated with their eating behavior problems. Subsequently, academic stress especially in terms of teacher-related factors contributes to their eating behavior problems. That the more college students experienced teacher-related stressors, the more they engaged in unfavorable eating behavior. This finding underscores the critical role of the teacher-student dynamic in shaping college students' well-being beyond academics. Addressing teacher-related factors contributing to academic stress may offer a promising avenue for interventions aimed at mitigating eating behavior problems among students, fostering a healthier educational environment.

Keywords:- Academic Stress, Teacher-Induced Academic Stress, Eating Behavior Problems, Obesity, Obsession, Philippines.

I. INTRODUCTION

The relationship between academic stress and eating behavior problems among college students is a critical area of study that warrants attention. College life is often associated with high levels of stress due to academic demands, social pressures, and personal responsibilities. Research has shown that stress can significantly impact eating behaviors, leading to a range of issues such as emotional eating, disordered eating, and unhealthy dietary habits (Ramadhani & Mahmudiono, 2021). Understanding how academic stress influences eating behavior problems is essential for developing effective interventions to support the well-being of college students.

Studies have indicated a strong correlation between stress levels and eating behaviors among college students (Ulhaq et al., 2022). Longitudinal research has highlighted changes in stress levels and eating behavior patterns over the course of students' academic journeys, emphasizing the need to explore these dynamics further (Ulhaq et al., 2022). Additionally, the prevalence of disordered eating behaviors and food addiction among college students underscores the importance of investigating the underlying factors contributing to these issues (Yu & Tan, 2016).

Moreover, the transition to college has been identified as a critical period where students may experience heightened levels of stress and potentially develop disordered eating behaviors (Vohs et al., 2001). Factors such as peer victimization and perceived stress have been found to mediate the relationship between stress and disordered eating, highlighting the complex interplay of psychological and environmental influences on eating behaviors (Rosén et al., 2023). Furthermore, the role of social support in buffering the association between stress eating and weight gain underscores the significance of interpersonal relationships in mitigating the impact of stress on eating habits (Darling et al., 2016).

By delving into the intricate relationship between academic stress and eating behavior problems, this study aims to contribute to the existing body of knowledge on student well-being and mental health. By examining how

stress levels influence eating behaviors, this research seeks to provide valuable insights for developing targeted interventions to support college students in managing stress and promoting healthy eating habits.

➤ *Specifically, this Study Aims to:*

- Determine the level of academic stress experienced by college students.
- Determine the level of eating misbehavior problems of the college students.
- Ascertain the significant relationship between academic stress and eating behavior problems
- Examine the significant effect of academic stress on eating behavior problems.

II. METHODS

The section presents the research design, research locale, population and sample, research instrument, data collection, statistical treatment, and ethical consideration.

A. Research Design

The researchers employed a quantitative approach non-experimental research design using descriptive-correlational techniques. In a descriptive-correlational study, researchers focus on observing and measuring variables as they naturally occur, without introducing any interventions or changes to the variables themselves. This approach is particularly useful when the goal is to understand the relationships between variables and describe the extent to which they are associated with each other (Hamora et al., 2022). Since the researchers aimed to examine relationship between the academic stress and eating behavior problems, this research design is deemed to fit for this study.

B. Research Locale

This study was conducted among the college students of San Agustin Institute of Technology (SAIT). This school is a private Catholic tertiary school founded in 1960 located in Valencia City, Bukidnon. It offers basic and higher education programs. The basic education department offers grade school, junior high, and senior high. The higher education department offers programs in teacher education, business administration, office administration, social work, midwifery, and technical-vocational programs.

C. Population and Sample

Probability sampling procedure was employed to determine the number of samples for the study. Probability sampling procedure is a methodological approach in research that involves selecting a sample from a population in a way that each member of the population has an equal and known chance of being chosen. This sampling technique is based on the principle of random selection, ensuring that every individual or element in the population has a fair opportunity to be included in the sample. Probability sampling procedures are essential in ensuring the generalizability and representativeness of research

findings to the larger population. Using Raosoft, a sample size calculator, 267 out of 1,300 college students were randomly selected and invited to participate in the study.

D. Research Instrument

The instrument used in this study was an adapted questionnaire titled Survey of College Academic Stressors (SCAS) by Calaguas (2012) and Adult Eating Behavior Questionnaire (AEBQ) by Hunot et al (2016). These adapted questionnaires were re-validated to check if items are suitable to the context of the present respondents of the study. Furthermore, these questionnaires were pilot-tested among 30 respondents to establish its reliability yielding a Cronbach's Alpha of .972, which means reliable.

E. Data Collection

To collect the data needed for the study, the researchers asked permission by writing a letter to the Vice President for Academic Affairs through the deans of the College of Education, College of Business, College of Social Work, and College of Midwifery. After granted with permission, the researchers conducted the study among the college students based on the schedules given by the different deans.

F. Statistical Treatment

The researchers employed mean and standard deviation to determine the level of academic stress and eating behavior problems exhibited by the respondents. To ascertain the relationship of the variables under investigation, Pearson r product-moment correlation analysis was used. Lastly, to examine the potential effect of academic stress on the eating behavior problems of the college students, multiple regression analysis was used.

G. Ethical Considerations

The researchers ensured that ethical protocols were observed during and after the conduct of the study. First, the researchers asked permission from the VPAA and deans of the different colleges. Next, the respondents were invited by the researchers to participate while informing them about the objectives, potential benefit, and possible risk by participating in the study. The researchers ensured that participation in the study is fully voluntary as indicated in their consent forms. No respondent was forced to answer the questionnaire. After the tabulation of data, questionnaires were shredded and the manuscript was submitted for plagiarism test to ensure originality.

III. RESULTS AND DISCUSSION

Presented below are the results and the implications of these results.

A. Level of Academic Stress

The table 1 below presents the level of academic stress experienced by the college students with an overall mean of 2.82 (SD=0.72) which means they are "moderately stressed".

Table 1: Level of Academic Stress

	Item Statements	Mean	SD	Interpretation
1.	Financial Related	3.32	0.76	Very Stressed
2.	Expectation Related	3.01	0.76	Moderately Stressed
3.	Classroom Related	2.90	0.66	Moderately Stressed
4.	Teacher Related	2.88	0.80	Moderately Stressed
5.	Subject Related	2.71	0.60	Moderately Stressed
6.	Enrollment and Admission Related	2.69	0.61	Moderately Stressed
7.	Schedule Related	2.60	0.75	Moderately Stressed
8.	Classmate Related	2.43	0.80	A little Stressed
Overall Mean		2.82	0.72	Moderately Stressed

Scale	Limits	Interpretation
4	3.26-4.00	Very Stressed
3	2.51-3.25	Moderately Stressed
2	1.76-2.50	A little Stressed
1	1.00-1.75	Not at all Stressed

The table further shows that of all indicators under academic stress, the students are very stressed when it comes to *financial-related factors*. This finding is not surprising since based on the demographic profile of the respondents, whose data are excluded in this report, almost half (43%) of the respondents' family income is less than PHP 9,100 or below USD 157.25 (*PHP 57.86 = USD 1.00, exchange rate at the moment of this writing*).

Financial stress, as Jones et al. (2018) indicated, is a significant concern for college students and can lead to negative outcomes such as anxiety, academic distress, and lower psychological well-being. Studies have identified financial stress, including issues like debt and the ability to pay for bills or tuition, as a common stressor among college students (Heckman et al., 2014; Jones et al., 2021). This stress can impact students' academic performance, social functioning, and overall well-being (Moore et al., 2021).

Meanwhile, college students are “moderately stressed” on *expectation-related factors, classroom-related factors, teacher-related factors, subject-related factors, enrollment-and-admission-related factors, and schedule-related factors*. Moreover, these college students claimed that they are “a little stressed” when it comes to *classmate-related factors*.

B. Level of Eating Behavior Problems

Presented below is table 2 that presents the level of eating behavior problems of the respondents with an overall mean of 3.41, which means “high”. It can be noted that the item with the highest mean of 3.82 (SD=1.16) is “*When I see or smell food that I like, it makes me want to eat during class discussions.*” Meanwhile, the item “*I eat more when I’m anxious about examination scores*” obtained the lowest mean of 3.33 (SD=1.16).

Table 2: Level of Eating Behavior Problems

Item Statements	Mean	SD	Interpretation
1. When I see or smell food that I like, it makes me want to eat during class discussions.	3.82	1.16	High
2. I often feel so hungry that have to eat something right away after class dismissal.	3.74	2.96	High
3. If I miss a meal I get irritable during classes	3.63	1.08	High
4. I look forward to mealtime's right after my last class.	3.52	1.00	High
5. I often feel hungry during class activities.	3.45	1.05	High
6. I eat more when I'm upset of my class adviser.	3.41	2.61	High
7. I eat more and more slowly during the course of a meal when I am stress about my school requirements.	3.40	1.09	Moderate
8. I often feel hungry when I am with someone who is eating inside the classroom.	3.39	1.20	Moderate
9. I often notice my stomach rumbling during overtime classes.	3.37	1.25	Moderate
10. I eat more when I am worried about my grades.	3.35	1.15	Moderate
11. I eat more when I'm anxious about examination scores.	3.33	1.16	Moderate
Categorical Mean	3.41	1.15	High

Scale	Limits	Verbal Interpretation
5	4.21-5.00	Very High
4	3.42-4.20	High
3	2.61-3.40	Moderate
2	1.81-2.60	Low
1	1.00-1.80	Very Low

This result is aligned with the findings of other researchers such as Serra et al. (2019) who revealed that a significant proportion of college students engage in disordered eating behaviors, with approximately 10.5% fulfilling diagnostic criteria for eating disorders. In terms of gender comparison, Shatkin (2020) noted that eating disorders are prevalent among college women.

C. Correlation Analysis between Academic Stress and Eating Behavior Problems

Table 3 presents the correlation analysis between academic stress and eating behavior problems. It can be gleaned on the table that all indicators under academic stress namely *enrollment-and-admission-related factors, subject-related factors, teacher-related factors, classmate-related factors, schedule-related factors, classroom-related factors, financial-related factors, and expectation-related factors* are significantly correlated with eating behavior problems among the respondents, all obtaining below 0.050 p-values respectively.

Table 3: Correlation Analysis between Academic Stress and Eating Behavior Problems

Independent Variable: Academic Stress	Dependent Variable: Eating Behavior Problems		
	Correlation Coefficient	p-value	Interpretation
Enrollment and Admission Related	.238	0.000	Significant
Subject Related	.249	0.000	Significant
Teacher Related	.300	0.000	Significant
Classmate Related	.236	0.000	Significant
Schedule Related	.166	0.006	Significant
Classroom Related	.177	0.004	Significant
Financial Related	.187	0.002	Significant
Expectation Related	.209	0.001	Significant

Academic stress has been consistently associated with eating behavior problems among college students. Research has shown that higher levels of academic stress are linked to emotional eating behaviors (Ramadhani & Mahmudiono, 2021). The transition to college, which is often marked by increased stress due to academic demands and social adjustments, has been identified as a critical period where disordered eating behaviors may emerge (Yu & Tan, 2016). Studies have also indicated that academic stress can lead to maladaptive coping mechanisms, such as unhealthy eating habits (Caso et al., 2020), and may contribute to weight-related issues like binge eating and purging.

D. Regression Analysis between Academic Stress and Eating Behavior Problems

Table 4 below presents the regression analysis performed to examine which among the indicators under academic stress best predict the eating behavior problems of college students.

Table 4: Regression Analysis between Academic Stress and Eating Behavior Problems

Dependent Variable: Eating Behavior Problems						
Independent Variable: Academic Stress	Unstandardized Coefficients		Standardized Coefficients	t-value	p-value	Interpretation
	Beta	Std. Error	Beta			
(Constant)	2.185	0.262		8.336	0.000	
Enrollment and Admission Related	0.099	0.102	0.082	0.974	0.331	Not Significant
Subject Related	0.056	0.110	0.045	0.506	0.613	Not Significant
Teacher Related	0.168	0.074	0.182	2.258	0.025	Significant
Classmate Related	0.068	0.068	0.073	0.997	0.320	Not Significant
Schedule Related	-0.049	0.077	-0.050	-0.636	0.525	Not Significant
Classroom Related	0.022	0.082	0.020	0.271	0.786	Not Significant
Financial Related	0.014	0.075	0.014	0.183	0.855	Not Significant
Expectation Related	0.059	0.076	0.061	0.783	0.434	Not Significant
	R		.296 ^a			0.000 ^b
	R ²		.808			0.709
	F		25.438			

The table further shows that of all the indicators under academic stress, only *teacher-related factors*, remain significant with a p-value of 0.025. This clearly signifies that only *teacher-related academic stress* can significantly contribute to the eating behavior problems exhibited by the respondents. Based on this premise, it can therefore be deduced that the more college students are bombarded with teacher-induced academic stress, the more these students engaged in disordered eating patterns.

In parallel to this finding, numerous studies have already claimed that teacher-induced academic stress can have significant implications for college students, potentially leading to various behavioral issues, including eating behavior problems (Miyake et al., 2022). In fact, Dicke et al (2014) and Núñez-Regueiro et al. (2023) claimed that teacher-induced stress could affect student learning and well-being. Teachers are therefore reminded that they play a crucial role in students' academic

experiences. Understanding sources of academic stress among students is essential for creating supportive learning environments (Hosseinkhani et al., 2021). Teachers who are aware of student stressors and respond effectively can help mitigate stress and promote positive learning outcomes (Willis et al., 2020).

IV. CONCLUSION AND RECOMMENDATIONS

The findings reveal that teacher-induced academic stress can significantly contribute to the eating behavior problems of college students. In other words, the stress caused by teachers, perhaps through academic demands, grading, or classroom interactions, can negatively impact students' eating habits. As a result, addressing teacher-induced stress could be an important factor in improving the overall well-being and eating behaviors of college students. Students' health is as important as their academics. Therefore, equal attention shall be given to

students' well-being. Lastly, reducing academic demands from the students is definitely a good point for reflection and consideration.

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