

# DIMENSIONS OF SCHOOL BURNOUT AS PREDICTORS OF SYMPTOMS OF ANXIETY, DEPRESSION, AND SUICIDAL IDEATION AMONG COLLEGE STUDENTS

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## ABSTRACT

*College students may experience symptoms of mental health problems like anxiety, depression, and suicidal ideation when exposed to a myriad of psychosocial stressors at school. One of these stressors includes school burnout, composing of three dimensions: (a) school exhaustion; (b) cynicism; and (c) sense of inadequacy. This study aimed to determine how the three dimensions of school burnout influenced symptoms of anxiety, depression, and suicidal ideation among Filipino undergraduate students. A total of 555 college students (Female=44.09%, Male=55.38%; Mage=20.28, SDage= 1.96) were chosen via stratified random sampling from a private higher education institution. Scores were analyzed via bivariate correlations and multiple regression analysis. All three dimensions of school burnout were significant predictors of anxiety ( $R^2 = 0.147$ ), depression ( $R^2 = 0.283$ ) and suicidal ideation ( $R^2 = 0.090$ ), with cynicism being correlated with symptoms of all three mental health problems. Sense of inadequacy, on the other hand, was only related to symptoms of anxiety and depression, while school exhaustion was only related to symptoms of anxiety. The findings underline the need for educators and administrators to strengthen theoretical and practical implications for mental health through proactive policies and early intervention strategies.*

**Keywords:** School Burnout, Anxiety, Depression, Suicidal Ideation, Mental Health

## INTRODUCTION

The World Health Organization (2017) estimated that more than 300 million people are suffering from depression which is equivalent to 4.4% of the world's population. Nearly the same number of people worldwide suffers from anxiety disorders since both conditions tend to be experienced simultaneously (i.e. comorbidity). The consequences of these disorders to lost health and functioning are huge. Depression has been ranked as the single largest contributor to global disability while anxiety disorders are ranked sixth. Depression has also been considered as the major contributor to suicide deaths which totals to around 800,000 every year. Suicide accounts for 1.5% of all the deaths worldwide which places it among the top 20 leading causes of death (WHO, 2017). Countries in South-East Asia and Western Pacific, which includes the Philippines, account for the largest number of

people afflicted with depressive disorders (48%) and anxiety disorders (43%), reflecting the relatively large population of these regions (WHO, 2017). In the Philippines, it is estimated that around 3.3% of population or 3,298,652 are suffering from depressive disorders while 3.1% or 3,075,517 Filipinos are afflicted with anxiety disorders (WHO, 2017). In the Global School-Based Student Health Survey conducted by the Department of Health of the Philippines and the World Health Organization, it was found that 17% of Filipino adolescents have attempted suicide one or more times within the past 12 months while 11% made a serious plan on how they would commit suicide (DOH, 2015). The increasing number of people worldwide afflicted with the abovementioned conditions warrants the importance of conducting researches that tackle and address mental health issues particularly among the young people.

The second period of life has long been characterized as a period of "storm and stress" (Hall, 1904, as cited in Lerner

& Steinberg, 2004). Adolescents are particularly prone to stress since they tend to experience significant transitions and perturbations where they are faced with a barrage of physical, emotional, cognitive, and social changes (Lerner & Steinberg, 2004). School has been acknowledged as an important developmental context considering the influence that it exerts on young people's social, emotional, and behavioral development through organizational, social, and instructional processes. In fact, from the time a person enters school until he/she completes formal schooling, children and adolescents spend more time in school than in any other place outside their homes (Eccles, 2004). Nevertheless, researchers have also acknowledged that negative school-related experiences may also be a source of significant stress among adolescents (Salmela-Aro, Kiuru, Pietikäinen, & Jokela, 2008). School burnout characterized by exhaustion, cynicism, and lack of efficacy has important consequences on mental health including depression, self-esteem, as well as suicidal risk (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002; Walburg, 2014). Taking into account the importance of understanding adolescent mental health as well as the significant role of school as a developmental context, the present study aims to determine how each of the three dimensions of school burnout, namely school exhaustion, cynicism toward the meaning of school, and sense of inadequacy at school, uniquely influence symptoms of anxiety, depression, and suicidal ideation among Filipino collegiate students from four private higher educational institutions.

### **Adolescent Mental Health**

According to the World Health Organization (2018), it is estimated that around 10 to 20% of young people around the globe experience a mental health condition. Globally, depression is the ninth leading cause of illness and disability among adolescents ages 10 to 19 while anxiety is the eighth leading cause, profoundly affecting adolescent functioning (WHO, 2018). In 2016, it is estimated that around 62,000 adolescents worldwide died as a result of self-harm. Suicide is the third leading cause of death among older adolescents ages 15 to 19 with 90% of adolescent suicide occurring in low- to middle-income countries (WHO, 2018). Focus on adolescent mental health is particularly relevant because it is an important predictor of adult well-being and psychiatric condition (Roberts, 2015). In this study, the researchers will be taking into account symptoms anxiety, depression, and suicidal ideation of collegiate students, though the data will not be used for diagnostic purposes.

Anxiety disorders are the most common form of psychopathology in childhood and adolescence which affects approximately 4 to 19% of young people (Graczyk & Connolly, 2015). Anxiety has generally been characterized by somatic symptoms as well as subjective anxiety and panic symptoms. Somatic symptoms include numbness or tingling, heart pounding or racing, and hands trembling. On the other hand, subjective anxiety and panic symptoms include fear of the worst happening, nervous, and fear of losing control (Beck, Epstein, Brown, & Steer, 1988). Anxiety and depression are distinct entities but they typically co-occur with each other, particularly because they share general symptoms of negative affect (i.e. comorbidity) (Stulz & Crits-Christoph, 2010). This overlap between anxiety and depression is said to be a function of the co-occurrence of symptoms as well as the high comorbidity of these clinical conditions (Wang & Gorenstein, 2013). In a study conducted by Slivar (2001) among 1868 high school students aged 15 to 19, school-related burnout was found to be associated with high levels of anxiety in addition to low self-esteem, poor family relationships, emotion-focused coping, and absenteeism.

Depression is considered as the fourth most significant disease among children and adolescents. It is also estimated that 24% of adolescents experience at least one clinically significant depressive episode before age 18. This condition creates significant burden among young people, their families, friends, and teachers (Roberts, 2015). Adolescents with depression have been described as having problems with emotions, managing anxiety, solving problems, and engaging in enjoyable activities, affecting their moods, thoughts, and behaviors. Young people with depression tend to sleep more and experience more appetite problems while others tend to develop delusions together with suicidal ideation and suicidal attempts. Aside from being at risk for other psychological disorders, adolescents with depression are prone to obesity, interpersonal conflict, unfulfilling social relationships, as well as academic and occupational problems (Roberts, 2015). Aside from genetic, biological, and cognitive theories that try to explain the risk factors that lead to depression among adolescents, constant exposure to stressful life events related to relationships, family members, as well as school may trigger negative cognitive styles including worry and rumination, setting high standards, and negative self-cognitions (Roberts, 2015). In a study examining the three-factor structure of school burnout among 1,418 high school students, depression was found to be associated with exhaustion, cynicism, and lack of self-efficacy. Further, these associations were found to be stable over time, showing that

school burnout can predict depressive symptoms during adolescence (Salmela-Aro, Kiuru, Leskinen, & Nurmi, 2009).

One of the most widely used measures of depression is the Beck Depression Inventory-II (BDI-II). Wang and Gorenstein (2013), after having conducted a comprehensive review of its psychometric properties, noted that the said instrument has proven to exhibit high reliability, capacity to discriminate depressed and non-depressed patients, as well as improved concurrent, content, and structural validity as evidenced by the numerous studies that made use of this instrument among non-clinical, psychiatric/institutionalized, as well as medical samples. Factor analytic studies on the depressive symptoms measured by the BDI-II found that its items tend to load on two factor structures: cognitive-affective and somatic-vegetative (Wang & Gorenstein, 2013).

Despite some advances in the understanding and the prevention of adolescent suicide, it remains and ranks as the third leading cause of death among young people, after accidents and homicides (Reidenberg, 2015). Suicidal ideation that includes specific and lethal preparatory plans such as looking for a way to die, researching suicide methods online, and acquiring means suggest an increased risk for suicide (Reidenberg, 2015). Suicide has generally been characterized as being determined by multiple rather than single causes, as such, preventive programs that aim to address this issue have been variously described as comprehensive and multilevel (Reidenberg, 2015). With regard to the relation of school burnout with suicidal ideation, Ang and Huan (2006) found that school burnout, specifically arising from high self-expectations and expectations from parents and teachers, was associated with suicidal ideation via depression among 1,108 Asian high school students. It has further been noted that the number of suicide cases usually peaks during examination periods when children and adolescents experience high levels of stress at school. It is therefore not surprising that children and adolescents who commit suicide usually have school-related problems (Toero, Nagy, Sawaguchi, Sawaguchi, & Sotonyi, 2001 as cited by Ang & Huan, 2006). Several researchers have acknowledged that the strong link between school burnout and suicidal ideation may be particularly pronounced among East Asian students because of the familial and cultural expectation to perform well in school. Academic excellence is highly valued among Asians families because it is perceived as one of the few avenues toward success in life (Gloria & Ho, 2003; Sun, Dunne, Hou, & Xu, 2013). Considering the prevalence of the abovementioned mental health conditions among adolescents as well as the familial and cultural emphasis placed by Asians on academic excellence, the present study will be examining the relations

of the three dimensions of school burnout with symptoms of anxiety, depression, and suicidal ideation.

## School Burnout

The concept of burnout has originally been regarded as a work-related disorder (Maslach, Schaufeli, & Leiter, 2001). Nevertheless, researchers and practitioners in educational settings have also found it useful in the school context. Although students are not employed, their core activities such as attending classes, doing assignments, and accomplishing requirements for a degree may be considered "work" from a psychological point of view (Salmela-Aro et al., 2008; Schaufeli et al., 2002). Silvar (2001) noted that school burnout is a consequence of excessive school demands, lack of control, lack of reinforcement for high achievement, lack of interpersonal relationships, as well as high expectations from significant others such as parents and teachers. In a study applying the concept of burnout among 1,661 undergraduate students from the Netherlands, Spain, and Portugal, Schaufeli and colleagues (2002) found that school burnout was inversely related to university engagement and performance, regardless of the participants' country of origin. It was also found that time pressure, negative psychosocial environment, as well as low academic performance were positively associated with school burnout. On the other hand, receiving support, motivation, and encouragement from teachers, classmates, and other members of the school appear to protect students from school burnout (Salmela-Aro et al., 2008). Much of the research on school burnout is focused on the Western perspective, but there is still a need to strengthen the implications of school burnout in the Eastern perspective.

As noted, school burnout has been characterized by exhaustion due to school demands, having cynical and detached attitudes towards one's school, as well as feeling inadequate as a student (Salmela-Aro et al., 2008; Schaufeli et al., 2002). The three dimensions of school burnout are strongly related but can be considered as separate constructs: school exhaustion, cynicism toward the meaning of school, and sense of inadequacy at school (Salmela-Aro et al., 2009). Following the original theory on work-related burnout, Schaufeli and colleagues (2002) defined school-related exhaustion as school-related feelings of strain and fatigue due to overtaxing schoolwork. School-related cynicism on the other hand pertains to an indifferent or distal attitude toward schoolwork as well as a general loss of interest in one's academic work and seeing it as meaningless. Lastly, lack of school-related efficacy refers to diminished feelings of

competence and achievement as well as to lack of school-related accomplishments. Results of the preliminary psychometric analyses on the School Burnout Inventory showed that higher depressive symptoms among adolescents were associated with higher levels of the three dimensions of school burnout. Further, the lower academic achievement and school engagement, the greater cynicism toward the meaning of school and sense of inadequacy at school were experienced by the adolescents (Salmela-Aro et al., 2009).

Although it has been acknowledged that school-related burnout appear to overlap with earlier concepts (i.e., stress, tiredness, and anxiety with exhaustion as well as depressive symptoms with cynicism and lack of efficacy) its dimensions are measured specifically in the school context unlike anxiety and depressive symptoms which are not context specific (Salmela-Aro et al., 2009). In other words, school burnout exclusively pertains to the unpleasant experience of students.

## The Present Study

Relative to the studies mentioned above, several gaps that warrant attention in the present study can be pointed out. First, although existing researches have been conducted on similar constructs (Erschens, et al., 2019; Madigan & Curran, 2020), few localized researches have delved into the study of school burnout despite its association with low academic achievement and motivation, poor self-esteem, school stress and tiredness, as well as internal and external behavioral problems of students (Salmela-Aro et al., 2009). Second, past researches on school burnout have treated it as a global construct without considering its specific dimensions as proposed by Schaufeli and colleagues (2002). Considering that its proponents have acknowledged the distinctiveness of each dimension of school burnout, each factor may have unique or distinct relations with symptoms of anxiety, depression, and suicidal ideation. Thus, by having separate analysis for school exhaustion, cynicism toward meaning of school, and sense of inadequacy at school, one would be able to see the nuanced paths from school burnout to the said mental health outcomes. Another limitation of most studies on school burnout is the frequent use of samples from industrialized countries in North America and Western Europe. As such, the generalizability of the results from these studies is limited. This is despite the fact that Asian students and parents place greater emphasis on academic excellence compared to their counterparts (Gloria & Ho, 2003; Sunet al., 2013). Taking into account this familial and cultural view on school performance, data from this study will be gathered from Filipino college students. Figure 1 presents the

hypothesized model of the current study with three dimensions of school burnout (i.e. school exhaustion, cynicism toward meaning of school, and sense of inadequacy) as predictors of symptoms of anxiety, depression, and suicidal ideation. Note that individual regression models were tested for each outcome variable.

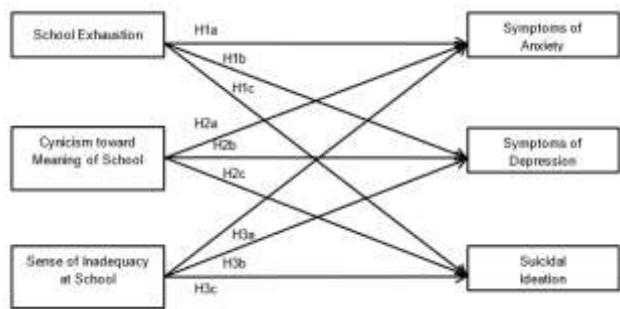


Figure 1. Conceptual Framework

## Research Problem

The following are the research problems that the present study intends address: (1) Does school exhaustion predict symptoms of anxiety, symptoms of depression, and suicidal ideation among college students? (2) Does cynicism toward meaning of school predict symptoms of anxiety, symptoms of depression, and suicidal ideation among college students? (3) Does sense of inadequacy at school predict symptoms of anxiety, symptoms of depression, and suicidal ideation among college students?

## Hypotheses

Drawing from the abovementioned research questions, it is hypothesized that: (1) higher levels of school exhaustion lead to greater symptoms of anxiety, symptoms of depression, and suicidal ideation among college students; (2) higher levels of cynicism toward meaning of school lead to greater symptoms of anxiety, symptoms of depression, and suicidal ideation among college students; and (3) higher levels of sense of inadequacy at school lead to greater symptoms of anxiety, symptoms of depression, and suicidal ideation among college students.

## METHODOLOGY

### Design

This study utilized a quantitative correlational design via multiple regression analysis to investigate on the estimated outcome between the variables. The data was process using the IBM SPSS Statistics version 23.

### Participants

College students of four private higher education institutions within the Philippines, taken via stratified random sampling, served as respondents for this study composed of 246 female and 309 male respondents ( $N=555$ ,  $M_{age}=20.28$ ,  $SD_{age}=1.96$ ). Among these respondents, 282 students (50.5%) came from the National Capital Region and 273 from three surround provinces (49.4%). 202 (36.4%) were 1st year students, 8 (1.4%) were 2nd year students, 55 (9.9%) were 3rd year students, 203 (36.6%) were 4th year students and 87 (15.8%) were 5th year students. Light snacks were provided to the participants after answering the survey.

### Procedure

An online survey containing the objective and procedure of the administration was created by the researches through google form. This online survey consisted of 7 parts: (1) Demographics, (2) Beck Anxiety Inventory, (3) Beck Depression Inventory (4) School Burnout Scale, and (5) Beck Scale for Suicidal Ideation. Participants were selected using a randomizer with Before this was administered, to the preselected students, an informed consent was discussed and explained to them. Respondent codes we also assigned in random after the informed consent was discussed. The respondent codes were used to access the survey which the researchers administered section per section.

### Measures

All measures used in this study are in English. These measures are uploaded through google forms and were used with the approval of the authors. Filter question were added on some survey to assure the credibility of the answers given by the respondents in of this research.

**Beck Anxiety Inventory.** The BAI (Beck, 1988) is a 21-item self-report measure of anxiety. It reflects the severity of the common symptoms of anxiety. The test is scored based on a scale of 0 (Not at all) to 3 (Severely - it bothered me a lot). Sample item consist of “Numbness or tingling (0) Not at all to (3) Severely - it bothered me a lot. The reported internal consistency of BAI is  $\alpha = .926$

**Beck Depression Inventory.** The BDI (Beck, 1961) is a 21-item instrument that is developed to measure depression symptoms and severity in persons age 13 and older. It has items that reflect the cognitive, affective, somatic and vegetative symptoms of depression. Each item is scored based on an ordinal scale from 0 to 3. Sample item consist of “(0) I do not feel sad, (1) I feel sad. (2) I am sad all the time, and I can't snap out of it. (3) I am so sad and unhappy that I can't stand it.” The reported internal consistency of BDI is  $\alpha = .904$

**Beck Scale for Suicidal Ideation.** The BSSI (Beck, 1988) is a 21-item instrument that is developed to quantify and assess suicidal intention. Each item is scored based on an ordinal scale from 0 to 2. Sample item consist of “(0) I have no desire to kill myself, (1) I have a weak desire to kill myself, (2) I have a moderate to strong desire to kill myself.” The reported internal consistency of BSSI is  $\alpha = .956$

**School Burnout Inventory.** The SBI (Salmela-Aro and Naatanen, 2005) is a 10-item instrument that measures three factors of school burnout: (a) exhaustion at school (b) cynicism toward the meaning of school and (c) sense of inadequacy at school. It follows a 6-point Likert-type scale with responses ranging from 1 (completely disagree) to 6 (completely agree). Sample item consist of “I feel overwhelmed by my schoolwork” The reported internal consistency of BSSI is  $\alpha = .873$

## RESULTS AND DISCUSSION

Table 1. Descriptive Statistics and Bi-Variate Correlations

	<b>N</b>	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>1. Anxiety</b>	558	21.64	11.96	-	.591*	.297*	.340*	.354*	.321*
<b>2. Depression</b>	558	15.60	9.94		-	.589*	.382*	.522*	.437*
<b>3. Suicidal Ideation</b>	558	2.89	6.01			-	.155*	.305*	.206*
<b>4. Exhaustion</b>	558	3.82	1.07				-	.605*	.695*
<b>5. Cynicism</b>	558	3.60	1.24					-	.671*
<b>6. Inadequacy</b>	558	3.76	1.19						-

\*p < .05

Table 1 shows the descriptive statistics and bivariate correlations of the 6 variables used in the study, Anxiety ( $M=21.64$ ,  $SD=11.96$ ), Depression ( $M=15.60$ ,  $SD=9.94$ ), Suicidal Ideation ( $M=2.89$ ,  $SD=6.01$ ) with the 3 dimensions measured by school burnout which are School exhaustion ( $M=3.82$ ,  $SD=1.07$ ), Cynicism towards the meaning of school ( $M=3.60$ ,  $SD=1.24$ ) and Sense of inadequacy at school ( $M=3.76$ ,  $SD=1.19$ ). Intercorrelations of the aforementioned variables appear to suggest significant positive relations. Values of these correlations range from weak to moderate.

Table 2 showcases the 3 models that were drawn by conducting a multiple regression analysis. Model 1 (Anxiety) shows that the overall model was significant,  $F(3, 554) = 33.071$   $p < .05$ , Adjusted  $R^2 = .147$ . The model explains 14.7% of variance accounted for by the predictor variables. Factors that predict Anxiety include all 3 school burnout dimensions namely exhaustion ( $\beta=.170$ ,  $p < .05$ ), cynicism ( $\beta=.208$ ,  $p < .05$ ) and inadequacy ( $\beta=.063$ ,  $p < .05$ ). Specifically, the results suggest that the higher the scores in these dimensions of burnout are significantly associated with Anxiety. It is also evident that model 2 (Depression) generated a significant result,  $F(3, 554) = 74.454$ ,  $p < .05$ , Adjusted  $R^2 = .283$ . Higher than the first model, the second model explains 28.7% of variance accounted for by the predictor variables. With only cynicism ( $\beta=.406$ ,  $p < .05$ ) and inadequacy ( $\beta=.135$ ,  $p < .05$ ) considered as predictor of Depression.

Table 2. Results of Multiple Regression Analysis

<b>3 Psychological Constructs</b>	<b>B</b>	<b>SE</b>	<b>b</b>	<b>F</b>	<b>Adj. R<sup>2</sup></b>
<b>1. Anxiety</b>					
Overall Model				33.071	.147*
Exhaustion	1.91	.632	.170*		
Cynicism	2.013	.528	.208*		
Inadequacy	.629	.607	.063*		
<b>2. Depression</b>					
Overall Model				74.454	.283*
Exhaustion	.395	.481	.042		
Cynicism	3.256	.402	.406*		
Inadequacy	1.128	.462	.135*		
<b>3. Suicidal Ideation</b>					
Overall Model				19.419	.090*
Exhaustion	-.353	.328	-.063		
Cynicism	1.549	.274	.319*		
Inadequacy	.179	.315	.035		

\*p < .05

Not far from the results of model 1, model 3 (Suicidal Ideation) can only explain 9% of variance accounted for by the predictor variable. Although the result is seen to be significant  $F(3, 554) = 19.419$ ,  $p < .05$ ,  $R^2 = .090$ , model 3 has the lowest predictor capacity with cynicism having a Beta ( $\beta$ ) of =.319 significant at  $p < .05$ .

## DISCUSSION

The present study examined the role of mental health symptoms of depression, anxiety, and suicidal ideation and their effects on levels of school burnout experiences by students. Results of the study revealed cynicism towards the meaning of school to be the most correlated factor among the three. Results of the study support Hypothesis 1a but not 1b and 1c. Results fully support Hypothesis 2. The data supports hypothesis 3a and 3b but not 3c. Overall, the results of the study support the claims of Hypothesis 2 and 3, but not Hypothesis 1. This could be because many students who feel symptoms of depression, anxiety, and suicidal ideation feel helpless and lose motivation for tasks and meaning in their lives.

The major contribution of the study is taken specifically in the context of anxiety, wherein all dimensions of school burnout were significant. This supports the literature regarding burnout and its correlation to anxiety (Walburg, 2014; Silvar, 2001). This could have been brought about by the academic requirements of the students or the learning environment, as this study is specific to Filipino students. These factors of school burnout may also be a cause of higher instances of school dropout among students (Bask & Salmela-Aro, 2013; Silvar, 2001). The mixed culture of the Philippines has contributed to a plethora of factors affecting education, such as a higher need to perform (Salmela-Aro, Kiuru, Pietikäinen, & Jokela, 2008), academic overload (Kwok, Gu, & Cheung, 2019), emotional regulation (Seibert, May, Fitzgerald, & Fincham, 2016; Seibert, Bauer, May, & Fincham, 2017), and maladaptive coping strategies (Meredith et al., 2019). These facts suggest that the sample of Filipino college students feel highly anxious when it comes to academic or school-related activities. This may suggest that certain academic programs and classes are more stress-provoking leading to higher levels of anxiety, which in turn would lead to higher levels of burnout among the student population. This data suggests that across all year-levels of college students from the schools sampled, student interventions need to be strengthened in order to combat the path of anxiety leading towards academic burnout. Deans, area chairs, and academic officials should assist their respective guidance offices towards more proactive programs geared towards addressing academic burnout amongst college students. However, the researchers did not have information regarding the participant's mental health condition, nor did they take into account the role of gender or socio-economic status.

A second key highlight of this research is the understanding of the level of suicidal ideation and cynicism among the selected population. As displayed among different types of students, academic life can be considered as psychologically toxic and a major source of stress was related to academic requirements and that chronic stress is seen as the most important cause of burnout among athletes (Chin et al., 2016; de Oliveria et al., 2013; Galán et al., 2014; Gerber et al., 2018; Gustafsson & Skoog, 2012). Their social environment also plays a key role in mediating thoughts of suicidal ideation and is essential to their well-being and performance (Granz, Schnell, Mayer, Thiel, 2018). The data suggests that although the overall model was significant ( $p < .05$ ,  $R^2 = .090$ ), there are still a number of students who are currently experiencing thoughts of suicidal ideation. This may be due to the lack of awareness of students with regards to student services of their respective guidance offices and efforts of the administration to lessen student mental health problems. Students should have more avenues to practice better mental health and have access to programs that reduce stress and assess levels of burnout. This has further implications for allowing students to reduce negative feelings towards academic progress leading towards suicidal ideation through techniques such as mindfulness (Xu et al., 2017).

It should be noted that this study has certain limitations. The researchers did not compare gender, nor did they compare which specific college majors had the greatest number of students with symptoms of depression, anxiety, and suicidal ideation. The researchers also did not take into account the newly implemented Senior High School program, as this program has received much clamor among educators in the Philippines. The scope of the study also did not tackle how to deal with outliers who appeared in the study. Different populations of students around the Philippines would give varying results due to differences in school culture, management, and overall educational quality.

## RECOMMENDATIONS

Recommendations for future studies may want to target specific populations of students in order to determine which courses or majors may be affecting students the most in terms of their mental health. Other considerations such as the year level of students should also be looked into. A different model may also be used in order to understand the underlying principles regarding levels of burnout and its correlation to

other psychological problems. Other factors, such as motivation, well-being, and peer support should also be taken into account for further study. Individual differences and socio-economic status should also be factored. As this research only dealt with school burnout, future researchers may want to study specific underlying causes of burnout in specific populations of students in order to help alleviate the increasing number of mental health cases in the Philippines. Since the researchers analyzed the data through three separate regression models, future researchers may consider analyzing the model as a whole, rather than individualized regression models.

The researchers recommend being more proactive in schools at detecting and monitoring the mental health of their students in order to engage in early intervention strategies. Special attention should be given to allowing students to develop themselves as to buffer against symptoms of depression, anxiety, and suicidal ideation. Guidance offices and academic officials should take special care in crafting programs and academic policies that are student-centered and holistic.

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