

Assessment of Academic Stress and Negative Coping Strategies of Freshmen Academicians

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Abstract

This study assessed the effects of stress management intervention on the academic stress and coping strategies of freshmen academicians. A quasi-experimental design was adopted using quantitative method and an intervention program on the 91 freshman students of Northern Samar. A total of 754 freshman students from the clustered state universities and colleges in the province of Northern Samar were included in the pre-test. Only 296 students qualified in the inclusion criteria among those who participated in the pre-test, only 96 students attended the intervention program, while only 91 freshman students completed the post-intervention tests. Academic stress and coping strategies were measured by Students Stress Inventory, and Brief Coping Orientation of Problem Experienced (Brief COPE). MANOVA was used to determine the significant difference between the pre-test and post-test on academic stress and the coping strategies of the respondents. ANOVA repeated measures were used to determine the significance and the effect of the intervention across 5-time interval pre-test and post-test assessments. There are significant differences between the pre-test and post-tests results of participants because of DEAL-based intervention program on academic stress and coping strategies. DEAL-based intervention is very effective in lessening the academic stress of the students including the students with severe academic stress. The intervention has positive effects on the negative coping strategy of the respondents.

Keywords: Academic stress, coping strategies, DEAL-based intervention

I. INTRODUCTION

College students, especially freshmen are prone to stress due to the transitional nature of college life. They must adjust to being away from their family for the first time. They maintain a higher academic performance and adjust to a new social environment. The change in school curriculum by the implementation of the K to 12 programs also added burden and caused stress among the students.

Mental health problem can affect anyone regardless of age, gender, ethnicity, and socio-economic status (WHO, 2013). In the Philippines, one in five people suffer from a mental health problem. Between 17 to 20 percent of Filipino adults experience psychiatric disorders, and 10 to 15 percent of Filipino

children, age 5 to 15 suffer from mental health problems. According to the National Statistics Office (NSO), mental health illnesses are the third most common forms of morbidity for Filipinos. Furthermore, a 2010 national census found 1.4 million people with identified disabilities showed that mental disability accounts for 14 percent of all disabilities. In the same NSO study, 88 cases of mental health problems were reported for every 100,000 Filipinos. Suicide is the second leading cause of death globally among people 15 to 29 years of age, according to the 2014 global report on preventing suicide by the World Health Organization (WHO, 2014). In the Philippines, the estimated number of suicides in 2012 was 2558 (550 female, 2009 male), according to the same report.

According to Ronald Del Castillo as cited by Bueno (2018), a clinical psychologist and an associate professor at the UP College of Public Health, entering college education poses an increased risk for developing mental health problems. The formative years play a crucial role in shaping an individual's mental health issues which may only surface through a confluence of stressors appearing at a particular time. All these frequently appear when one enters university. College students are exposed to a considerable amount of stress, which necessitate successful and constantly changing coping strategy (Bueno, 2018).

A rich body of research indicates that university students are exposed to so many stressors daily. Amongst other things, Lewin and Mawoyo (2014) pointed out that university students are under pressure to perform academically, adapt to the higher education environment, and manage finances. The study also remarked that university students often view stress as a negative experience, tend to adopt ineffective coping strategies, and struggle to access resources that could assist them in managing challenges. The study also found that when stress was perceived negatively, and the required coping strategies and supportive resources were lacking, students may become impaired.

In order to prevent this severe stress which may lead to any psychological conflict among freshman students, effective stress management programs should be implemented and be made part of the curriculum as mandated by the newly approved mental health law. Self-care strategies using a combination of stress management techniques could be learned by students as part of their curriculum. Being able to manage and control stress is a useful skill not only for life as a student, but also for life beyond university years. A thorough understanding of what stress and depression means and how to respond to these conditions could reduce the stigma attached to them. It will make the students be aware, enable them to come forward, and seek medical treatment.

Hence, this study using the DEAL based intervention was conducted to determine the effect of this intervention on the freshman students' academic stress and coping strategies. Most interventions require a substantial amount of time and resources, which make them difficult for the schools to implement. This study adopted the DEAL model as stress management intervention because it only entailed a minimal amount of time and money. It did not require the researcher with rigorous training and manpower. Likewise, it was simple to implement and easily integrated in the academic schedule.

A stress management intervention based on the DEAL model developed by Muhamad Saiful Bahri Yusoff is utilized. The goal of the intervention is to help students in handling their stresses. The first part of the intervention is a general discussion on the importance of managing stress, the concepts of stress, the relationships between stress, stressors and coping strategies, and the impacts of unfavorable stress on individuals. The second part is a hands-on where the participants will be able to identify their individual stress level, stressors and coping strategies through simple psychometric assessments and the results will be discussed in detail as well as the general overview of the ways of handling stressful situations. The third part is a group discussion on a scenario shown in the form of a video clip. The session will consolidate students' understanding on the previous inputs. The last part of the workshop is the feedback in which the students will share the experiences they have learned from the intervention and things to be improved in the future as a result of attending the intervention.

This study on the Assessment of Academic Stress and Negative Coping Strategies of Freshmen Academicians generally aimed to evaluate how academic stress and coping strategies were affected by the DEAL-based intervention. Specifically, it aimed to answer the following questions: (1) are there significant differences between the pre-test and post-test scores of participants, as a result of

DEAL-based intervention program on the following measures, (2) does DEAL-based intervention program have significant effects on students with severe cases of academic stress, and (3) does DEAL-Based intervention program have significant effects on the negative coping strategies of students with severe cases of academic stress?

II. METHODS AND PROCEDURE

This is a quasi-experimental research conducted among selected freshman college students in the province of Northern Samar. This is an intervention study that examined the effects of the DEAL-based stress management intervention on freshman students' academic stress and coping strategies. The research was able to identify how freshman students' academic stress and coping strategies changed over time by comparing the data that were collected from a single group over five-time point interval pre-test and post-test intervention assessments.

The participants of this study were the 91 college freshman students in the province of Northern Samar from the clustered four (4) schools that were selected from among the eight (8) different tertiary schools in the province. A total of 754 freshman students from the chosen clustered schools participated the pre-test. However, only 296 freshman students qualified the inclusion criteria on moderate- to-severe level of academic stress and practicing negative or dysfunctional coping strategies. All the students who qualified the inclusion criteria were invited to attend the orientation and the seminar-workshop on stress management. However, only 96 responded and consented to participate in the intervention using the DEAL model. A total of 91 freshman students completed the four-time post intervention assessments and were considered as the respondents of this study.

Inclusion. The freshman students who got a moderate-to-severe level of stress, frequently practicing denial or avoidant coping strategies during the pre-test were chosen as the participants and were invited to attend the stress

management intervention program using the DEAL Model.

Exclusion. Those students who had a normal-to-mild stress were excluded from this study. Those who refused to participate and did not give a written consent were also excluded as participants. The students who missed any post-intervention assessments were also excluded from the study.

To achieve the purpose of this study, cluster sampling was used. The schools were clustered into state universities, private schools, computer schools, and agri-tech vocational schools. Primary data were collected from one school representing each cluster. Hence, the data were collected from one state-university which is the University of Eastern Philippines (UEP)-Main Campus, one private school which is the Eastern Visayas Central Colleges (EVCC), while ASIA and Global College represented the computer schools, and San Isidro Balicuatro School of Agriculture and Trade represented the agro-tech vocational schools. Due to the small number of students from the private schools, all the 354 freshman students from the clustered schools of private, computer and agri-tech vocational schools were chosen as participants in the pre-test. The researcher, in consideration of the large number of freshman students of UEP (3,678) allocated 400 students to represent the state university with 50 students representing every college or department. Thus, a total of 754 freshman students were subjected to pre-test as baseline measurement of this study.

The participants answered the questionnaires comprised of two (2) well-validated and reliable measurement instruments. The Student Stress Inventory (SSI) is an instrument developed by Mohammad Aziz Shah Bin et al. (2015). SSI contains 40 negative items to measure four (4) sub-scales (10 items for each sub-scale) which are sub-scale 1: Physical, 2: Interpersonal relationship 3: Academic; and 4: Environmental factor. As for scoring, the SSI has an ordinal scale of the 'Never', 'Somewhat frequent', 'Frequent' and 'Always'. The value marks given for each choice are equal to 1 for 'Never',

2 for 'Somewhat Frequent', 3 for 'Frequent' and 4 for 'Always'. The administration process approximately took only 15 to 20 minutes. SSI questionnaire had good content validity with an overall score of 0.805 (80.5%). SSI had a high overall reliability coefficient of .857.

The Brief COPE was developed by Carver, C. S. (1997). It consists of 30 items describing coping methods and are rated under four (4) categories of responses (I haven't been doing this at all, I've been doing this a little bit, I've been doing this a medium amount, I've been doing this a lot) to indicate how frequent they have been doing what the items describe. There are three (3) coping strategies such as negative coping strategy, adaptive coping and accommodative coping strategies in the 15 domains. The reliability coefficients (Cronbach's Alpha) of the coping domains have ranged from 0.56 to 0.89.

Stress Management Intervention Based on the DEAL Model. A stress management intervention was conducted based on the DEAL model developed by Muhamad Saiful Bahri Yusoff (2013). The goal of the intervention was to help students in handling their stresses. Relevant theoretical inputs related to stress, stressors and coping strategies were discussed; thus, the participants were able to reflect on their personal strengths and weaknesses. The first part of the intervention was devoted to a general discussion on the importance of managing stress, the concepts of stress, the relationships between stress, stressors and coping strategies, and the impacts of unfavorable stress on individuals. The second part was allocated for hands-on where the participants were able to identify their individual stress level, stressors and coping strategies through simple psychometric assessments and the results were discussed in detail as well as the general overview of the ways of handling stressful situations. The third part was allotted for group discussion on a scenario that was shown in the form of video clip. The session consolidated students' understanding on the previous inputs. The last part of the workshop was devoted to feedback

and the students shared the experiences they have learned from the intervention and things to be improved in the future as a result of attending the intervention. The total time of the intervention was four (4) hours.

Descriptive statistics was applied to calculate mean and standard deviation. MANOVA was used to determine the significance between the pre-test and post-test on academic stress and the three coping strategies of the respondents. ANOVA repeated measure was used to determine the significance and the effect of the intervention across five-time interval pre-test and post-test assessments.

Data were collected from first week of September 2018 to third week of December 2018 after obtaining approval from the Dean of Student Affairs, the UEP President, School Administrators and the Ethics committee. The researcher clustered first the school and then conducted the pre-test to all the 354 freshman students from the clustered schools of private, computer and agri-tech vocational schools and the 400 freshman students from UEP. Thus, a total of 754 students were included in the pre-test. Among the students who participated the pre-test, there was only 296 who qualified the inclusion criteria. The selected subjects based on the inclusion criteria were then invited to attend a three-hour briefing session on the study protocol and for the signing of an informed consent however, only 96 students responded and consented to attend the seminar workshop. After ensuring that each participant met the study inclusion criteria, the researcher personally provided them with the information about study aims, design, procedures, their rights as participants, anticipated benefits, and possible adverse effects of participation. The participants were also informed that they were free to withdraw their consent anytime. The researcher then conducted a stress management workshop. The participants underwent a four-hour stress management intervention using the DEAL Model. The post-test assessments were conducted at one (1) week interval for four (4) consecutive weeks.

III. RESULTS AND DISCUSSIONS

Transition from pre-university to university life needs a period of adjustment as it has many challenges and difficulties. Social life along with school demands cause stress and depression among freshmen. Through early detection of symptoms, students would be able to seek assistance from administrators or university counselors who could help prevent and minimize the effects of mental, emotional and physical morbidity. In the present study, it is worth observing that the academic stress of the respondents had lowered. The present study revealed that the intervention had lessen the

academic stress of the freshman students including those with severe cases. Figure 1 shows the pretest and posttest results on academic stress of the freshman students. The result showed that the academic stress of the respondents had lowered down after being subjected to the DEAL-based intervention. The findings indicate that the intervention had lowered the academic stress and coping strategies of the respondents. This findings affirmed the findings in the study of Conley et al., (2015) that interventions among college students have shown promise in reducing symptoms of anxiety, depression, and general distress.

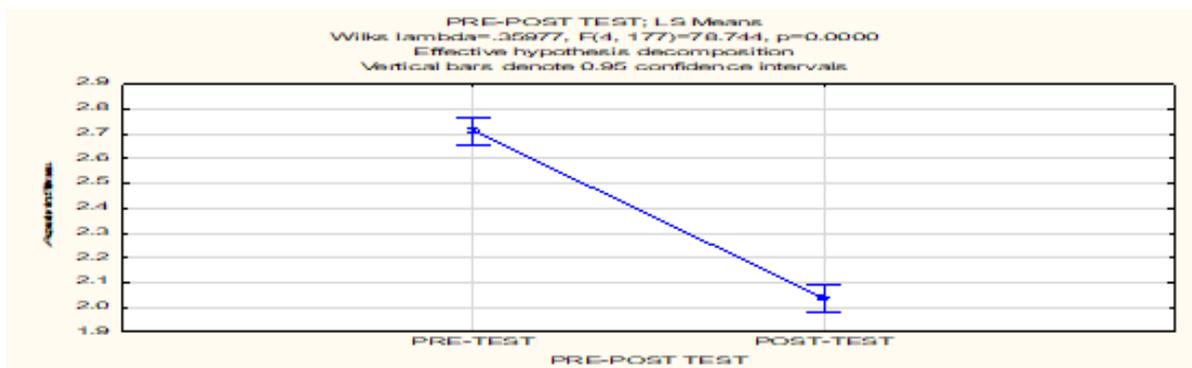


Figure 1. A Graph Showing the Academic Stress Before and After DEAL-Based Intervention Program

MANOVA revealed that there were significant differences between the pre-test and post-test scores of participants as a result of DEAL-based intervention program on academic stress

and coping strategies. The academic stress and coping strategies had lowered down after the intervention.

Table 1. Comparison of the Respondents' Pre-test and Post-Intervention Tests according to Academic Stress and Coping Strategies.

MANOVA PRE-TEST vs. POST-TEST (N = 91)

Criterion	Test		DF		P
	Statistic	F	Num	Denom	
Wilks'	0.35977	78.744	4	177	0.000***
Lawley-Hotelling	1.77954	78.744	4	177	0.000***
Pillai's	0.64023	78.744	4	177	0.000***
Roy's	1.77954				

*** $p < .001$

DV = Academic Stress, Coping Strategies
Measures = Pre-Test vs. Post-Test

IV = DEAL-Based Intervention Program

The result revealed significant differences in negative coping, adaptive coping and

accommodative coping strategies after the intervention. This finding affirmed what Lazarus (1993) pointed out that coping with a stress-inducing situation is a composite amalgam of thoughts and attitudes for which a variety of coping strategies is required and not just a one-dimensional approach. In addition, the coping process is a slow process, so an individual may select one method of coping (i.e. avoidance, emotion-focused or adaptive coping) under one set of circumstances and a different strategy (i.e. emotion focused strategies or problem-focused) at some other time. Such selection of strategies takes place as the situation changes.

Figure 2 shows the significant difference between the pre-test and post-test result on the negative coping strategies of the respondents. The intervention had minimized the respondents' utilization of non-adaptive or dysfunctional coping such as, self-blame and behavioural disengagement, self-distraction, denial and substance or alcohol abuse. This findings affirmed the transactional theory of Lazarus and Folkman (1987) that intervention helps people develop effective coping strategies and mitigate unproductive strategies. Such affirmed the findings of Yusoff (2015) finding DEAL- based intervention effective which modified the participants' coping strategies to effectively manage stress.

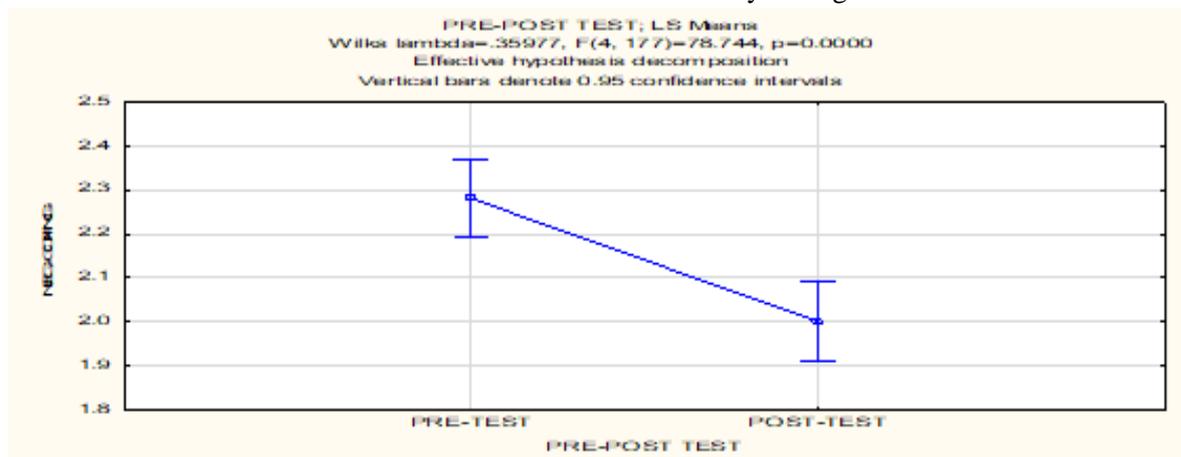


Figure 2. A Graph Showing the Negative Coping Before and After DEAL-Based Intervention Program

In determining the effects of the intervention on the level of academic stress of the respondents with severe cases, it was observed that DEAL-based intervention program had positive effects in lessening the academic stress of the students with severe academic stress. ANOVA repeated measures on Table 2 shows that there are significant differences between the pre-test and post-test scores of the participants as a result of DEAL-based intervention program. The DEAL-

based intervention program had positive effects on lessening the academic stress of the students with severe academic stress as evident in the significant differences between the pre-test (3.194) and post-test (2.350) scores on academic stress and on repeated measures in three (3) follow-up sessions ($F_1 = 2.325$; $F_2 = 2.293$; $F_3 = 2.325$).

Table 2. Analysis of Variance for Academic Stress of Students with Severe Academic Stress

Source	DF	SS	MS	F	P
PRE-POST TEST	1	20.6972	20.6972	285.432	0.000***
Error	180	13.0521	0.0725		
Total	181	33.7493			

*** $p < .001$ $N = 4$

Figure 3 shows the effects of the DEAL-based intervention on the academic stress of the respondents with severe academic stress. The result revealed that the DEAL-based intervention lowered down the academic stress of the respondents. This indicates that DEAL-based intervention is an appropriate intervention in reducing the academic stress of the students. This finding affirms the findings

of Yusoff, et al. (2015) that the intervention successfully reduced the perceived academic stressors of the medical students. This also confirmed the study of Conley, et al., (2015) that interventions among college students have shown promise in reducing symptoms of anxiety, depression, and general distress.

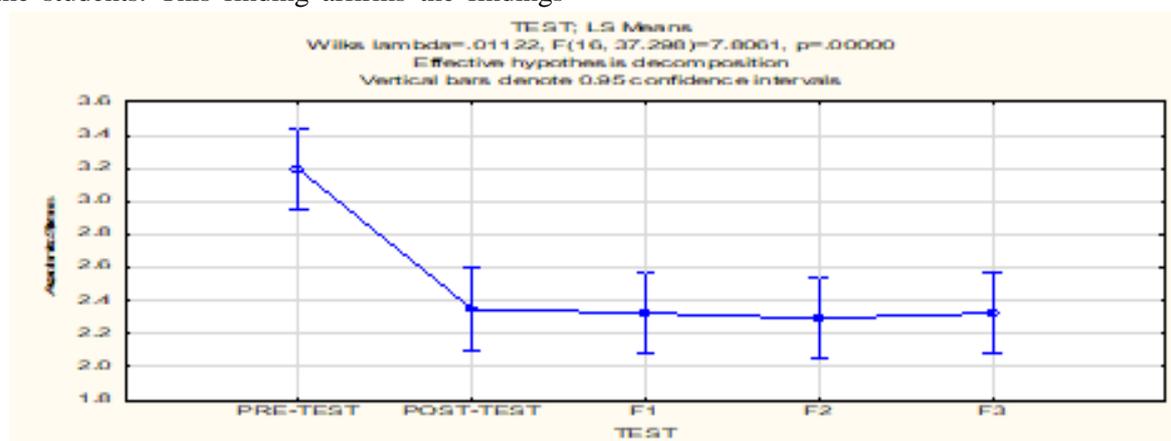


Figure 3. A Graph Showing the Effects of DEAL-based Intervention on the Academic Stress of the Respondents with Severe Academic Stress

In this study, DEAL-based intervention program showed positive effects on the tendency of the students with severe academic stress to practice negative coping strategy. Table 3 shows that DEAL-based intervention had positive effects on the tendency of the students with severe academic stress to practice negative coping strategy as evident in the significant differences between the pre-test (2.468) and post-test (2.181) scores on negative coping strategy and on repeated measures in three (3) follow-up sessions (F1=1.500; F2=1.275; F3= 1.325). The intervention had minimized the respondents' frequency of practicing negative coping strategy such as self-

blame, behavioural disengagement, self-distraction, denial and substance or alcohol abuse. This is an affirmation of the claims of previous authors that intervention helps people develop effective coping strategies and mitigate unproductive strategies (Lazarus & Folkman, 1987). The findings indicate that negative coping responses may be the first response that freshman students have to a large amount of stress or it may be that freshmen do not know of other ways to deal with stress besides reacting with a negative emotional outburst. This also affirmed the findings of Yusoff (2015) finding DEAL-based intervention effective which modified the participants' coping strategies to effectively manage stress.

Table 3. Analysis of Variance for Students with Severe Academic Stress on Negative Coping Strategy

Source	DF	SS	MS	F	P
PRE-POST TEST	1	3.5504	3.5504	19.123	0.000***
Error	180	33.4188	0.1857		
Total	181	36.9692			

*** $p < .001$ $N = 4$

Figure 4 shows the effects of the DEAL-based intervention on the negative coping strategies of the respondents with severe academic stress. The result revealed that the DEAL-based intervention had positive effects on the negative coping strategies of the respondents. The

intervention had minimized the respondents' frequency of practicing negative coping strategy such as, self-blame, behavioral disengagement, self-distraction, denial and substance or alcohol abuse.

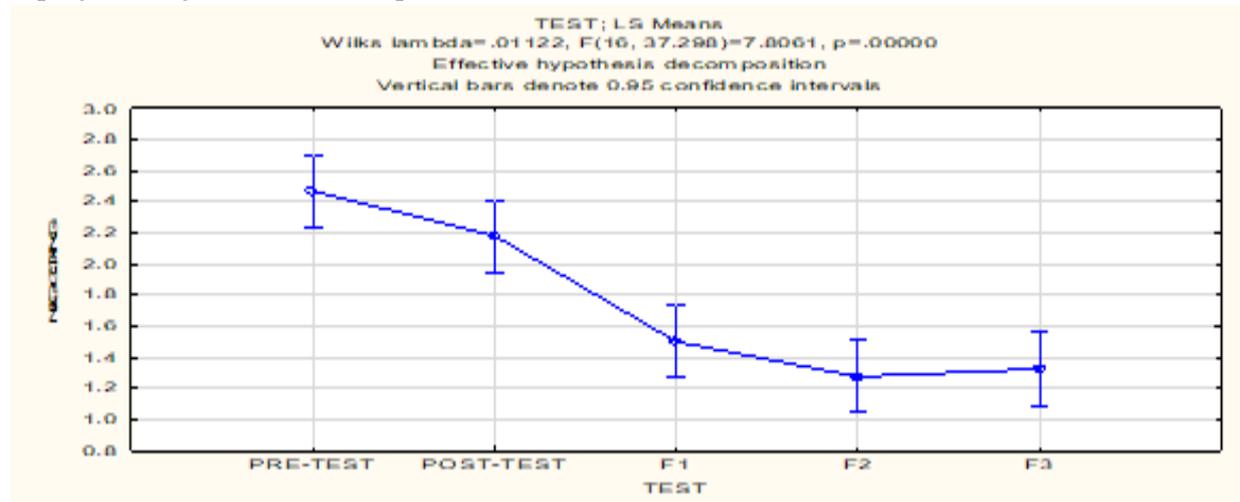


Figure 4. A Graph Showing the Effects of DEAL-Based Intervention on the Negative Coping Strategies of the Respondents with Severe Academic Stress

IV. CONCLUSIONS AND RECOMMENDATIONS

It can be inferred from this study that there are significant differences between the pre-test and post-test scores of the respondents as a function of DEAL-based intervention program on academic stress and coping strategies. DEAL-based intervention program has positive effects on lessening the academic stress of the college freshman students including those with severe cases of stress as evident in the significant differences between the pre-test and post-test and on repeated measures in three (3) follow-up sessions. The intervention has positive effects on lessening the frequency of practicing the negative coping strategy of students with severe academic stress.

In the light of the findings and conclusions, the following recommendations are given: The DEAL-based intervention should be adopted by the higher educational institutions. This intervention is recommended to be part of the guidance program as preventive intervention on students' well-being in colleges and

universities. Future study should include any other interventions to compare with the DEAL-based to support its effectiveness. Future research should include qualitative methods such as focus group discussion and in-depth interview should be included to explore the respondents' view about the impact of the intervention to support its validity.

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