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PSYCHOLOGICAL DISTRESS AND ACADEMIC SELF-EFFICACY OF COLLEGE STUDENTS: THE MODERATING ROLE OF ANXIETY AMIDST THE COVID-19 PANDEMIC

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ABSTRACT

The distress and anxiety brought about by the academic demands negatively influences student performance during the abrupt shift to full-online classes. However, the literature indicates that self-efficacy significantly alleviates the negative effect of distress and anxiety. The current study aims to determine the relationship of COVID-19 related distress and academic self-efficacy as well as investigate if anxiety is a moderator that aggravates the distress of Angeles University Foundation college students. A total of 223 college students' participants were acquired from a voluntary convenience sample and participants answered the questionnaires through Google Forms, namely: The Online Learning Self-Efficacy (OLSE), The Kessler Psychological Distress Scale (K6), and The Coronavirus Pandemic Anxiety Scale (CPAS-11). Additionally, all statistical analyses were conducted using SPSS 23. Moreover, the hierarchical regression was conducted to determine if COVID-19 distress predicted academic self-efficacy (ASE) with anxiety as the moderator. The findings indicate that COVID-19 distress and anxiety negatively affect the beliefs of the students in their capacity to perform academic tasks. However, evidence failed to support the moderating role of anxiety between Covid-19 distress and academic self-efficacy.

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1. INTRODUCTION

The COVID-19 pandemic has greatly affected the lives of many people especially in the educational sector, wherein academic institutions were forced to shut down operations until further notice in order to limit social interaction and to contain the virus (Alemany-Arrebola, et al., 2020). This in turn led to a transition from the traditional face-to-face classes to an online education. However, this shift posed various challenges to students, such as dealing with distress (Saravanan et al., 2020) and having disrupted self-efficacy (Ritchie, et al., 2021). This is indicated in a study by Qin et al. (2021) which reveals that 10.5% of students in a Chinese province that were enrolled in a distance learning program self-reported high psychological distress. Given as to how college students in general are said to be a vulnerable population because of how stressful their student life can be (Bruffaerts, et al., 2018), the change to a purely online mode of learning caused mental distress to them. This distress students feel may lead to poor conviction in achieving one's academic purpose and performance or simply, their academic self-efficacy.

Academic self-efficacy is defined as one's belief of their capacity in successfully performing a given academic task to reach a certain academic goal (Sharma & Nasa, 2014). In a study conducted by Grøtan et al. (2019), they found that students who experience severe mental distress are four times more likely to experience low academic self-efficacy. This is further demonstrated by Navarro-Mateu et al. (2020) who claimed that 29% of the students in their study with high stress levels also had low levels of academic self-efficacy. Moreover, because of the risks brought upon by the pandemic, there has been a rise in anxiety levels of people, especially in university students (Rodríguez-Hidalgo, et al., 2020). The student's anxiety heightened their pandemic distress (Browning, et al., 2021) which further worsens their overall psychological health. Thus, anxiety is defined as a long-term feeling of apprehension due to an uncertain or unpredictable future threat (Knight & Depue, 2019). In line with this, Browning et al. (2021) argued that pandemic situations like this can cause higher anxiety levels therefore can also cause drastic effects on the amount of distress.

COVID-19 related distress has especially affected students because of the changes in their environment. According to Social Cognitive Theory, a person's thoughts and feelings can affect their behavior which in turn is influenced by their social environment. Moreover, self-efficacy is said to be vulnerable to changes in the environment (Bandura, 1999). This shift caused by the pandemic contributed to student distress which in turn affected their performance and ultimately lowered their academic self-efficacy. Furthermore, because of these uncertainties and problems they encountered caused by the change in environment, students develop anxiety which hampered the development of their academic self-efficacy.

Psychological distress is closely related to anxiety but a fine line draws between them. In the study of Kashiwazaki et al. (2020) anxiety and psychological distress was treated as separate variables; wherein it was also found out that anxiety is a predictor of psychological distress. While psychological distress serves as an umbrella term that includes non-specific symptoms of anxiety (Viertiö, et al., 2021), anxiety is a more specific concept that means having lengthened feelings of fear due to future threat that is unpredictable. Additionally, these two variables that will be utilized in the study will particularly focus on the context of the Coronavirus disease 2019 (COVID-19) pandemic situation.

With these given arguments, it is hypothesized that as one experiences more mental distress caused by COVID-19, their academic self-efficacy decreases, wherein anxiety aggravates the impact of psychological distress to academic self-efficacy. However, there is a lack of research conducted with regard to anxiety as a moderator to two variables specifically COVID-19 distress and academic self-efficacy that should help in exploring further the moderating effect of anxiety. Likewise, there also was little to no study on the impact of the pandemic and its impact on anxiety levels in university students on the local setting such that in a Filipino sample, and much less on academic self-efficacy expectations as well as studies that have taken into consideration relationships between self-efficacy and other variables during COVID-19 (Alemany-Arrebola, et al., 2020). Thus, this study aimed to ascertain the relationship between COVID-19 related distress and academic self-efficacy and establish that anxiety worsens COVID-19 related distress. Furthermore, this research used moderator analysis using the Hierarchical Regression in SPSS that will be able to determine if college students' anxiety affects the direction and intensity of the association between their COVID-19 distress and academic self-efficacy. Moreover, it intended to build upon the various insights undertaken already by other researchers in the field and to also help future scholars that might want to delve further how students may properly manage the distress and anxiety caused by the ongoing pandemic. Lastly, educators and instructors will benefit from this study by fine-tuning their teaching style to their students' demands and needs and ultimately help them improve their academic self-efficacy.

1.1 COVID-19 Distress

The COVID-19 pandemic has greatly affected not only the physical health but also the mental health of people. In fact, a study by Brouwer et al. (2021) claims that the significant mental health issue during this pandemic is the psychological distress or COVID-19 related distress, which steadily increases as the pandemic also persists. Psychological distress is defined as an uncomfortable or overwhelming emotional state brought on by events, stressors, or difficulties in one's life (Ridner, 2004). As explained by Health e-University in the website entitled Psychological distress in 2007 https://www.healtheuniversity.ca/EN/CardiacCollege/Wellbeing/Stress_And_Sense_Of_Control/Pages/psychological-distress.aspx, psychological distress happens when you are faced with stressors that you are unable to cope with. Distress can affect the way you think, feel, or act, and can make it hard to cope with troubling situations. It is difficult for a person under distress to function normally, communicate, or think clearly. If it lasts for a long period, it can be damaging to a person's mental and physical health (As explained by Zencare team in the website entitled

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Eustress vs distress: Zencare blog in 2021 https://blog.zencare.co/eustress-vs-distress/). Moreover, Moberg (1987) stated that both acute and chronic stress can cause distress if the body's biological systems are sufficiently disrupted and its coping mechanisms are overwhelmed. Because of the prolonged quarantine phases brought about by the pandemic, stress experienced by the general populace is even worsened resulting in a state of distress.

Due to the sudden modifications and changes on the environment during the COVID- 19 pandemic, it has greatly influenced many things in the academic context too. Goldberg et al. (2021) reported that there is a growing concern about the reported poor mental health of students which was said to be brought about by the whole pandemic situation. This is further demonstrated in the study of Qin et al. (2021) wherein they found out that psychological distress among college students during the pandemic was relatively high and in the study of Salvarani where more than 70% of college student respondents from Italy have reported high psychological distress.

According to Qin et al. (2021) lack of personal space at home, decrease in-person contact with peers, and efficacy of online learning worsened Covid-19 distress. This is further evidenced by Chen et al. (2020) wherein he mentioned that the school suspension, limited outdoor activities and self-quarantine may result in psychological distress or COVID-19 distress. In line with this, according to Lorant et al. (2021) the lockdown, decreased levels of social support, reduction in social activities and exposure to COVID-19 were all associated with greater risk of psychological distress. The distress of students includes concerns about academic performance, pressure to achieve, and post-graduation plans as well as poor academic performance, and the intention to stop their studies (Sun, et al., 2021). With the abovementioned, it is therefore important to consider psychological distress as a variable because it relates to college student's educational and career development (Thompson, et al., 2019). Therefore, because COVID-19 is likely to cause chronic psychological distress and affects students (Browning, et al., 2021), their self-efficacy or beliefs in themselves was jeopardized. In fact, Alemany Arrebola et al. (2020) revealed that the stress on the academic context due to pandemic situations could affect students' self- efficacy.

1.2 Academic Self-Efficacy

Academic self-efficacy (ASE) refers to the belief of students to complete academic tasks and adjust to changes in the academic environment (Uzun & Karatas, 2020). College student's academic self-efficacy has been vulnerable due to the distress brought by the COVID-19 pandemic. It has also brought an enormous effect on the higher education institutions at a global level (Adedoyin & Soykan, 2020) and the shift from face-to-face classes to an online learning system has a detrimental impact on college students (Alemany-Arrebola, et al., 2020; Bokayev, et al., 2021). In fact, Navarro-Mateu et al. (2020) found that highly stressful situation has caused distress (distress is prolonged or unaddressed stress). With this, research conducted by Dost et al. (2020) shows that the academic self- efficacy of students has been greatly affected in a way that students do not feel motivated and find online learning as uninteresting, unenjoyable, and not as effective as traditional face-to-face learning. In addition to this, the school closures, sudden changes in people's lives, difficulty concentrating at home, and financial hardships are some of the factors that negatively affected the students' academic self-efficacy while in the pandemic (Aguilera-Hermida, 2020).

With that being said, academic self-efficacy (ASE) is said to be crucial in academic learning since it influences learners' performance (Hodges, 2008; Geitz, et al. 2016). Therefore, how students think, feel, and motivate themselves during educational tasks has an influence on their academic self-efficacy (as explained by Wigfield & Eccles in the book entitled Development of Achievement Motivation: A volume in the educational psychology series in 2002). Moreover, as explained by Verešová and Foglová in the book entitled Academic self-efficacy, approach to learning and academic achievement in 2018 said that ASE is a construct that motivates the learning of students using self-monitoring, self-evaluation, and self-regulatory processes like goal setting. Bandura (1997) also argued that the beliefs of students on his/her capability in accomplishing various tasks have a significant impact on whether the student will succeed in a specific area.

Furthermore, previous studies have shown that students' ASE is strongly associated with academic performance (Richardson, et al., 2012; Honicke and Broadbent, 2016). Also, the study conducted by Chemers et al. (2001) showed that higher levels of academic self-efficacy is positively correlated with academic achievement. All of this means that students who perform well in their academics are those students with higher levels of academic self-efficacy. However, due to the pandemic situation, college students in the study of Hashemi (2021) revealed that students felt unacquainted and dissatisfied with the "new normal". This in turn has also highly affected the ASE of students in a negative manner wherein they reported multiple challenges, poor academic performance, and uncertainty due to the unprecedented situation (Hashemi, 2021).

The aforementioned review of related literature leads to the idea that academic self-efficacy is an important variable to be considered. As Odaci (2011) expressed, "students' belief in their academic self-efficacy and their ability to begin and continue their studies is highly important" (p. 110). Likewise, Yokoyama (2019) claimed that ASE is one of the most important factors for students to achieve academic success. This claim was derived from his focused narrative review based on the previous findings about the relationship of ASE and academic performance; wherein it was mostly found that ASE tends to correlate with academic performance. In other words, this claim by Yokoyama (2019) simply means that as students' ASE is improved, then they may be able to perform well in academics and may also achieve higher academic outcomes. In line with this finding, a supporting claim by Pajares and Valiante (2002) revealed that ASE influences the students' decisions or choices and their plans of action; which is why ASE is a key contributing factor for academic success. On the other hand, students' ASE during the pandemic has decreased because of the sudden changes in the environment that it has brought to people's lives especially in the educational sector (Abreu, 2020). Therefore, it can be considered that one of these sudden changes is the distress brought by the COVID-19 pandemic and from here it can be hypothesized that COVID-19 distress influences the academic self-efficacy of college students.

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1.3 Anxiety

Uncertainty is a natural and unavoidable part of life, only a portion of things around us is certain and which we have control over (as explained by Robinson and Smith in the webpage entitled Dealing with Uncertainty in 2023 https://www.helpguide.org/articles/anxiety/dealing-with-uncertainty.htm). Whilst we are in the middle of a global pandemic, the majority still do not know when it is about to end, whether the situation might worsen or the fear of acquiring the COVID-19 virus alone can catastrophize overwhelming feelings of panic and tension in the body (As explained by Smith and Robinson in the web page entitled Coronavirus anxiety: Coping with stress, fear, and worry in 2023 https://www.helpguide.org/articles/anxiety/coronavirus-anxiety.htm). This apprehension due to an uncertain or unpredictable future threat is defined as anxiety by Knight and Depue (2019). In addition, as explained by American Psychological Association in the website entitled Anxiety In 2022 https://www.apa.org/topics/anxiety elaborated anxiety as an emotion accompanied by feelings of tension, worried thoughts and bodily changes such as increase in blood pressure. According to the Canadian Mental Health Association and BC Division in the website entitled Mental health: COVID-19 and Anxiety in 2021, while anxiety is a normal and expected reaction to the pandemic, the presence of anxiety alone can start to cause harm if not managed.

The COVID-19 disease has been considered the worst pandemic outbreak in the new millennium and the whole global demographic is tremendously affected including university students whose anxiety level has already been a public concern beforehand (Al-Sukayt, et al., 2020). Teenagers and college students can easily feel anxious trying to juggle roles in schools, friends, family, work as well as figuring out the uncertainties in their life. According to Cheng et al. (2021) symptoms of anxiety have seen to be prevalent among college students during the COVID-19 pandemic, and showed a significant increase after the initial stage of the outbreak. Some college students, especially those with the risk factors, exhibited persistent or delayed symptoms.

In the Philippines, a study with 1879 students reported that 25% of the student sample experienced moderate to server anxiety due to the virus outbreak, quarantine, and fear of infection (Tee, et al., 2020) Additionally, Hegde et al. (2020) presented other contributing factors to anxiety which include fear and worry about one's health and of their loved ones, difficulty in concentrating, disruptions to sleeping patterns, decreased social, and increased concerns on academic performance. Furthermore, Badovinac et al. (2020) reported that anxiety has even worsened due to school closures, loss of routine and loss of social connection due to quarantine. Anxiety is further triggered among college students because of the worry that they might not last with the transition from face-to-face classes to online learning. Students also have the fear that they might not be able to comply due to lack of resources which may result in failing grades. In Malaysia, although measures taken primarily reduced the outbreak of COVID-19, measures such as lockdowns, strict isolation, social distancing, emergency remote teachings, and uncertainty and delays in commencement of schools, colleges, and universities have significant implications on students' anxiety levels.

It is inevitably true that anxiety causes emotional turmoil on the well-being of an individual most especially to students who experience many changes as they adapt to the new normal (as explained by Zentari et al. in the web page entitled Being a student during COVID-19 in 2020 https://pursuit.unimelb.edu.au/articles/being-a-student-during-covid-19). At this time, besides testing, planning, and implementing new teaching and learning environments, educational institutions need to assess the students' mental health so that appropriate measures can be taken to help students cope with unprecedented changes.

1.4 Theoretical Framework

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1.5 Present Study

To fully grasp the purpose of this research, the present study aimed to investigate whether there is a relationship between COVID-19 related distress (prolonged and unattended stress) and academic self-efficacy (ASE) of college students. Although there are many foreign studies that address the fact that college students are experiencing distress due to the pandemic and also shows a significant effect towards their academic self-efficacy (Navarro-Mateu, et al., 2020-); there is still no local research in the Philippines that college students are currently suffering from this distress which further hampers the development of their ASE. It was also found in existing studies that the pandemic has caused college students to have high anxiety levels, thus this situation has made them more psychologically distressed (Browning, et al., 2021; Di, et al., 2020). In line with this, a study conducted by Petzold et al. (2020) have revealed that anxiety amidst pandemic leads to significant psychological distress. Furthermore, there are also no available studies which show that anxiety moderates the relationship between COVID-19 distress and academic self-efficacy. With that, the present study also intended to determine if anxiety (feelings of apprehension, worry, and tension) is an aggravator to COVID-19 related distress making the given situation of college students worse than before. Specifically, distress emphasizes psychological tension and prolonged and severe stress. While anxiety involves worry and apprehension about an event. If an individual experiences worry and apprehension their distress will worsen. Thus, anxiety aggravates distress.

On the other hand, this study was rooted from the Social Cognitive Theory of Albert Bandura which exemplified that self-efficacy is susceptible to environmental demands. Therefore, this theory served as the backbone of the present study for its main objectives to be met.

2. METHOD

2.1. Participants and Procedures

The researchers made use of a cross-sectional study that analyzed data of variables collected at one given point in time. In the context of the present study, COVID-19 distress served as the independent variable, academic self-efficacy served as the dependent variable while anxiety served as the moderator variable. This design was suitable during the current COVID-19 situation and it was also applicable in determining the relationship between the independent variable and the dependent variable. Also, this design allowed the researchers to determine whether the anxiety of college students further aggravated their COVID-19 distress. Therefore, through this research design, the researchers were able to see if the anxiety of college students affected the direction and strength of the relationship between their COVID-19 distress and academic self-efficacy.

Data were collected from November 2021 to January 2022. The researchers utilized Google Forms in preparing the online questionnaire that was used in the present study. Additionally, to ensure that the participants were protected from any ethical violation, all ethical issues were reviewed and approved by the Ethics Review Committee of the university prior to the actual data collection. As the ethics clearance was obtained, the researchers then proceeded to the data collection proper. The total number of participants that took part in the study was 223. The participants represented a diverse range of demographic backgrounds including age, year level, college department and gender. Most of the participants were 153 (68.6%) females while 69 (30.9%) were Male. Age ranged from 21 to 31 years old with a mean age of 21.108. Most participants that participated were students in Art and Sciences courses (i.e., B.S. Psychology, B.A. Communication, B.S. Biology).

2.2. Instruments

The Online Learning Self-Efficacy Scale (OLSE) was used to measure the academic self-efficacy of college students during the COVID-19 pandemic. The tool was developed by Zimmerman & Kulikowich (2016) and it intends to measure the self-efficacy perceptions of university students taking up courses in an online mode of learning. The scale consists of three factors namely, learning in the online environment (10 items), time management (5 items), and technology use (7 items). Overall, the OLSE is composed of 22 items with each measured on a 6point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). A rating of 1 signifies that students believe they would perform the task poorly; a rating of 6 signifies that students believe that they could perform the task at an expert level. We obtained a .94 Cronbach's alpha for the whole questionnaire based on the responses of the participants ran through SPSS.

The Kessler Psychological Distress Scale (K6) is one of the most widely used psychological distress scales. The tool is developed by Kessler et al. (2002) and it provides a quick diagnostic test for mental distress and it is a shorter version of Kessler Psychological Distress Scale (K10). The K6 is composed of 6 items with each measured on a 5-point Likert scale, ranging from: 4-All of the time, 3-Most of the time, 2 Some of the time, 1-A little of the

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time, and 0-None of the time. In line with this, the items in the scale assess the frequency of the following mental health symptoms in the past 30 days: feeling nervous, hopeless, restless/fidgety, so sad that nothing could cheer them up, that everything was an effort, and worthless. The scale obtained a .89 Cronbach's alpha for the whole questionnaire based on the responses of the participants ran through SPSS.

To measure anxiety as a moderator variable, The Coronavirus Pandemic Anxiety Scale (CPAS-11) was utilized in the study. This scale has originally been designed and validated in a sample of adults from different regions across the Philippines to measure the prevalence of symptoms of anxiety caused by the COVID-19 pandemic and in order to identify those who may require mental health assistance. The 15-item instrument is scored on a 4-point Likert scale (never=0, sometimes=1, often=2 and always=3). The scale obtained an interrim internal consistency of α=.88.

2.3. Ethnical Considerations

In order to ensure that there will be no ethical violations, the researchers first secured the approval of the ethics review committee of the university. To rule out any ethical dilemmas that may be encountered in the process of the data collection, the researchers ensured utmost protection for the participants by taking note of the confidentiality and privacy of the information supplied by the research subjects which are safe-kept and will solely be used for the purpose of research alone. Breaching of confidentiality is minimized by avoiding the disclosure of personal data unless for the benefit of the participants (eg. should there be an instance wherein a participant is at risk of harm, he or she should be protected by removing personal identifiers from study documents immediately, encrypting these computer-based files to prevent unauthorized access, and storing the data gathered in a password-protected computers or files.) Should there be an instance wherein a participant wishes to discontinue his or her involvement, the decision is dealt with full respect. Additionally, answering of questionnaires was conducted through an online medium which only the researchers have access with and no one else to avoid explicit exposure of responses. Obtained data was retained only until the study was completed before being appropriately disposed of without any traceable data. If subject participants chose to remain anonymous, that will be best respected for the sake of securing their anonymity. This instigated protection and didn't impose any possible harm. Lastly, an informed consent was provided to ensure the scope and limitations undertaken in the study.

3. RESULTS

In order to ensure that there will be no ethical violations, the researchers first secured the approval of the ethics review committee of the university. To rule out any ethical dilemmas that may be encountered in the process of the data collection, the researchers ensured utmost protection for the participants by taking note of the confidentiality and privacy of the information supplied by the research subjects which are safe-kept and will solely be used for the purpose of research alone. Breaching of confidentiality is minimized by avoiding the disclosure of personal data unless for the benefit of the participants (eg. should there be an instance wherein a participant is at risk of harm, he or she should be protected by removing personal identifiers from study documents immediately, encrypting these computer-based files to prevent unauthorized access, and storing the data gathered in a password-protected computers or files.) Should there be an instance wherein a participant wishes to discontinue his or her involvement, the decision is dealt with full respect. Additionally, answering of questionnaires was conducted through an online medium which only the researchers have access with and no one else to avoid explicit exposure of responses. Obtained data was retained only until the study was completed before being appropriately disposed of without any traceable data. If subject participants chose to remain anonymous, that will be best respected for the sake of securing their anonymity. This instigated protection and didn't impose any possible harm. Lastly, an informed consent was provided to ensure the scope and limitations undertaken in the study. Table 1 exhibits the demographic profile.

Table 1.
Demographic profile of the participants

Age		
M	SD	Range
21.108	1.367	21-31
Gender		
	Frequency	Percentage
Male	69	30.9
Female	153	68.6
Total	223	100
College		
	Frequency	Percentage
Allied Medical Profession	38	17
Arts and Science	82	36.8
Business and Accountancy	46	20.6
Criminal Justice	7	3.1
Computer Science	3	1.3
Engineering and Architecture	13	5.8
Education	5	2.2
Nursing	29	13

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Total	223	100

Based on the results (see Table 2) the academic self-efficacy of college students during the pandemic has obtained a weak, negative correlation towards COVID-19 Distress (r = -.260, p = .000) and Anxiety (r = -.192, p = .002). Anxiety and Covid-19 distress obtained positive and moderate relationship (r = .588, p = .000). The hierarchical regression was conducted to determine if COVID-19 distress predicted academic self-efficacy with anxiety as the moderator (see Table 3).

Table 2.
Correlation Matrix and Descriptive Statistics of Research Variables

		1	2	3
1. Academic Self-efficacy		-	-.260***	-.192**
2. Covid-distress		-	-	.588***
3. Anxiety		-	-	-
	M	4.58	3.02	1.13
	SD	.782	.934	.691
	α	.94	.89	.88

Note: N=223; p<.05*, p<.01**, p<.001***

Table 3.
Hierarchical Regression

Variable	*β*	SE	R^2	ΔR^2
Step 1			.024	
Gender:				
Male-Female	0.008	0.114		
Other-Female	0.555	0.780		
Age	0.085*	0.038		
Step 2			.0933	.0688
Gender:				
Male-Female	-0.080	0.112		
Other-Female	0.750	0.756		
Age	-0.075*	0.037		
Distress	-0.225*	0.056		
Step 3			0.096	0.003*
Gender:				
Male-Female	-0.0821	0.112		
Other-Female	0.7348	0.757		
Age	-0.079*	0.037		
Distress	-0.193*	0.068		
Anxiety	-0.074	0.091		
Step 4			0.100	0.041*
Gender:				
Male-Female	-0.074	0.112		
Other-Female	0.736	0.757		
Age	-0.081*	0.037		
Distress	-0.121	0.099		
Anxiety	0.175	0.269		
Distress* Anxiety	-0.076	0.077		

Note: N=223; p<.05*

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3.1. Hierarchical Regression Analysis

On Step 1, demographics were entered specifically gender and age of the participants which shows 2.45% significant R^2. This shows that age (β = 0.08 p < .05) is significant as a predictor of Academic Self-Efficacy while gender: Male-Female (β = 0.01) and Other-Female (β = 0.55) fails to do so. Step 2, introducing the Distress variable together with the demographics age (β = -0.08, p < .05) and gender: Male-Female (β = -0.08) and Other-Female (β = 0.75) accounted for 9.33% significant R^2 and a 6.88% R^2 change for the variation in Academic Self-Efficacy. In addition, Distress (β = -0.22, p < .05) predicted the development of Academic Self-Efficacy while age (β = -0.08, p < .05) remained as a predictor in the same manner. Moreover, a value 9.61% significant R^2 with 0.28% of R^2 change in variation resulted in Step 3 when Distress (β = -0.19, p < .05) and Anxiety (β = -0.07) were entered together with age (β = -0.08, p < .05) remaining significant and gender: Male-Female (β = -0.08) and Other-Female (β =0.73). Results show that Age and Distress remained as predictors of Academic Self-Efficacy. Finally, the Step 4 revealed a value of 0.04% R^2 with a significant 4.10% R^2 change of variation of Academic Self-Efficacy when the interaction of two variables, Distress (β = -0.12) and Anxiety (β = 0.18) were entered together with the demographics age (β = -0.08, p < .05) and gender: Male-Female (β = -0.07), Other-Female (β = 0.74). Showing the interaction of the two variables Distress*Anxiety (β = -0.08) there is still a lack of significance with gender, Distress, Anxiety, Distress*Anxiety except age. In summary, the age and distress of students determine their ASE. However, the nonsignificant interaction of anxiety and distress indicate that anxiety does not worsen the impact of distress to ASE.

4. DISCUSSION

The goal of the study is to prove the relationship between COVID-19 distress and ASE and that anxiety moderates the relationship between COVID-19 distress and Academic Self- Efficacy. Thus, as results were analyzed, it shows that there is an inverse and weak, negatively significant relationship between COVID-19 distress and academic self-efficacy. It was proven that the ASE is vulnerable to the environment because it was predicted by COVID-19 distress. However, based on the results, it was also found that anxiety is not significant as a moderator. Thus, the researchers failed to support the hypothesis that anxiety affects the relationship between COVID-19 distress and Academic Self- Efficacy.

4.1. COVID-19 Distress and ASE

The findings of the study were concurrent to the claims of Social Cognitive Theory wherein the academic self-efficacy is vulnerable due to environmental demands (Bandura, 1991, 1998, 2001). In a previous study conducted by Freire et al. (2020) it was found that stressful situations l such as the COVID-19 pandemic can negatively affect a student's academic self-efficacy. People tend to react to surroundings after evaluating the consequences of a specific event. Thus, if an individual perceives certain stimulus as a threat, it will generate a state of distress (Sebastian, 2013). In line with this is according to the Social Cognitive Theory, wherein self-efficacy is seen as a resource with regard to stress vulnerability (Bandura, 1997). In this case, when individuals encounter a stressful situation, they have the tendency to exhibit a low sense of self-efficacy (Muris, et al, 2001). Hence, findings indicate that college students ASE during the pandemic was slightly affected. Regarding the emotional challenges, students in the study of Aguilera-Hermida (2020) reported stress, anxiety, being worried about getting sick (coronavirus), and changes in their mental health. An increased amount of psychological distress and high levels of anxiety was also reported in the study of Heckel and Ringeisen, (2019). With this, student's ASE and capability to study while facing challenges in tertiary institutions were influenced (Abbasi, et al.,2020; Aboagye, et al.,2020; Agarwal & Kaushik, 2020).

Furthermore, based on the study of Liang et al. (2020) the results of their survey showed an increasing negative emotion (fear, sadness, uncertainty) because it was conducted only 2 weeks after onset of COVID-19 pandemic. On the other hand, the present study was conducted 2 years after the pandemic has occurred and it only yielded a negative, weak correlation between Academic self-efficacy to COVID-19 distress and anxiety. It can be inferred from here that the influence of this stressful event is decreased as people are being more adaptable to this kind of situation through time.

Consequently, as the college student's anxiety due to pandemic increases, so does their COVID-19 distress. Consistent with the study of Browning et al. (2021), students experiencing anxiety become more distressed because of the pandemic and can also cause drastic effects on the amount of stress. -Research conducted by Rodríguez-Hidalgo et al. (2020) support the findings of the study wherein it revealed that psychological distress has direct effects on anxiety during pandemic lockdown.

4.2. Moderating Role of Anxiety

Specific results gained from this study include the failure to prove the moderating role of the variable anxiety between the relationship of the dependent and independent variables. Given that the research was conducted two years after the onset of the pandemic, participants' responses may have influenced the findings to a great extent. According to Zimmerman (2020), the second wave of the pandemic has given university students a considerable amount of time to adjust to autonomy. Dresel et al. (2015) also supported the claim that these students engage in self-regulated learning and make use of their resource-management strategies namely effort regulation, time management, attentional regulation, and motivation. Resource-management strategies played an important role in the urgent shift to remote education because college students were inclined to practice self-study which overtime, became effective for them (Son, et al., 2020). Furthermore, quarantine measures have loosen beginning from the second wave of the pandemic until present showing that students even under confinement has improved learning

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efficiency and had had positive effects on their academic performance because anxiety levels have also decreased (Odriozola-González, et al., 2020).

The Theory of Coping Flexibility proves the reason as to why anxiety showed no significant role as a moderator variable. Cheng et al. (2021) explains the nature of such theory wherein it postulates the following: (1) responsiveness to the unchanging demands of the environment and (2) flexibility in situating coping methods with current demands. In that similar sense, resilient copers tend to recognize uncontrollable and aversive situations such as the pandemic into their complex characteristics. With the presence of the coping flexibility theory and its relation to psychological adjustments evident from the findings, individuals who have a significant level of coping flexibility tend to have lower anxiety levels compared to individuals who have lower levels of coping flexibility (Cheng, et al., 2021). Furthermore, while COVID-19 pandemic progresses in an unforeseeable maner, a few of the anxiety-triggering issues may no longer draw out extreme to similar levels of anxiety in the future waves (Cheng, et al., 2021).

4.3. Limitations

Certain limitations encountered during the conduct of the study were recognized. Employing the chosen sampling method failed to provide the researchers a list of target participants which constitutes as the first limitation of our study. Second limitation is the fact that all of the participants were recruited from the same university. In order to make findings more generalizable, new studies involving college students from diverse geographical and cultural contexts are needed. Further, the data collected were based on self-reports which can limit the veracity of the findings. This is because participants may have response biases ranging from a misunderstanding of the items to social desirability bias (i.e., the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others, even if the survey is anonymous) (Rosenman, et al., 2011).

Another limitation of this study is that distress was measured in a general manner, and it is possible that it overlapped anxiety as a moderating variable due to its wide scope psychologically. With that being said, the results showed that anxiety didn't have a significant contribution in the model wherein it failed to contribute changes to understand academic self-efficacy even better. There is this possibility that anxiety is under the umbrella of distress, that is why the findings showed that anxiety did not give an additional effect in the relationship of distress and academic self-efficacy. Lastly, according to the study of Cheng et al. (2021) as the pandemic is continuously evolving in an unpredictable manner, anxiety-inducing issues identified may no longer elicit anxiety to the same degree in subsequent waves. This leads to our last limitation because the time when the survey was conducted is years after the onset of pandemic, there is a chance that different results may be acquired if the research survey was conducted during the early phase of the pandemic.

4.4. Recommendations

First, future researchers should expand the selection of their desired population. Increased respondents may involve acquiring college students from different universities. Second, it is highly accepted if future researchers will opt to apply a different instrument that will best fit the study's variables. Also, the researchers will highly appreciate the implementation of a different sampling method because the employed method in this study may not reach the target sample size because of the current online education set-up. Another recommendation is the study may be enhanced by modifying certain variables or alteration of the moderator variable may also be possible (e.g. depression) to establish a much better relationship with COVID-19 distress and academic self-efficacy. Lastly, it is also recommended for future researchers that they should delve more about the coping flexibility theory in the context of COVID-19 pandemic and also the beneficial role of coping flexibility in relieving heightened anxiety when handling the vicissitudes emerged during the pandemic.

4.5. Implications

The aim of this research was to examine the relationship between distress and academic self-efficacy of college students as well as to know whether anxiety aggravates the paralleled variables. Likewise, the researchers also addressed the lack of local research concerning anxiety as a moderator variable. Although the findings failed to prove the latter, the researchers used the Theory of Coping flexibility in explaining as to why anxiety is not a significant moderator. Many people's mental health has been compromised as a result of the sudden need to navigate this "new normal." Coping flexibility has been identified to promote adjustment to stressful life changes, as evidenced by a reduction in symptoms of anxiety and depression commonly experienced during stressful life transitions. Moreover, coping flexibility is the efficient use of coping strategies in response to certain situational demands, and is proposed as an adaptive quality during this time of upheaval (Cheng, et al., 2021). Thus, the present study will serve as additional evidence for the claims of the said theory. Further, the findings have provided support on the hypothesized beneficial role of coping flexibility in reducing heightened anxiety when dealing with the vicissitudes of the pandemic.

In line with this, the theoretical framework used to establish the former hypothesis was deemed fit and showed strong importance to the research objectives. As explained by Bandura, et al. in the book entitled Social foundations of thought and action: A social cognitive theory in 1986, the interplay of cognitive, behavioral, personal, and environmental factors determines motivation and behavior of humans making self-efficacy its core concept of the theory perse wherein it becomes susceptible to changes happening in the environment. In this case, the researchers have proven how effective and advantageous using Social Cognitive Theory in various research pertaining to behavioral observations and reinforcements which are commonly studied in the field of Psychology. Moreover, using the said theory can help educational institutions and instructors to further understand students' needs that would give aid in reframing measures in adapting to the current situation in this time of pandemic.

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In this sense, the researchers believe that the educational sector would benefit best from this thesis because they should be able to tweak teaching styles that can further increase students' motivation and result in great academic performance. Universities need to consider the existence of the negative impacts that the current situation brings about because these students most likely need to be given more psychological interventions to manage their distress and anxiety. In line with that, this research raises a number of opportunities for future researchers most specifically to our locale given that there are few and far between too many researchers conducted about college students who are currently suffering from distress and how it affects their academic self-efficacy as well as whether present anxiety aggravates the relationship of the previously mentioned variables.

5. CONCLUSION

The COVID-19 outbreak has brought various changes and adjustments on different sectors in the society including the educational sector. Because of the rigorous prevention of the spread of the virus, people were confined at home and students were forced to comply with the online set-up. This manifested a great amount of distress that affected their motivation and belief to perform well academically. COVID distress and academic self-efficacy although has a weak relationship are negatively associated depending as well on the onset of the pandemic. In addition, anxiety despite the significance of the formerly mentioned variables, shows no implication with their relationship. Findings in this study can assist future researchers in analyzing why anxiety failed as a moderator variable despite the presence of the pandemic and the significant relationship of COVID distress and academic self-efficacy. Finally, this study does not only make unique theoretical contributions relating to the psychological field of study but also to the educational sector and universities in line with their teaching styles which can be tweaked to provide guidance to students' psychological well-being. In the similar sense, this fosters a healthy studying environment which could help further with their academic self-efficacy.

6. REFERENCES

Abbasi, S., Ayoob, T., Malik, A., & Memon, S. I. (2020). Perceptions of students regarding E-learning during Covid-19 at a private medical college. *Pakistan Journal of Medical Sciences*, *36*, 57-61. https://doi.org/10.12669%2Fpjms.36.COVID19-S4.2766

Aboagye, E., Yawson, J. A., & Appiah, K. N. (2020). Covid-19 and E-Learning: The challenges of students in tertiary institutions. *Social Education Research*, *2*(1), 1-8. https://doi.org/10.37256/ser.122020422

Abreu, J. L. (2020). Times of Coronavirus: Online education in response to the crisis. *Daena: International Journal of Good Conscience*, *15*(1), 1-15.

Aguilera-Hermida, A. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, *1*, 1-8. https://doi.org/10.1016/j.ijedro.2020.100011

Alemany-Arrebola, I., Rojas-Ruiz, G., Granda-Vera, J., & Mingorance-Estrada, Á. C. (2020). Influence of COVID-19 on the perception of academic self-efficacy, state anxiety, and trait anxiety in college students. *Frontiers in Psychology*, *11*, 1-7. https://doi.org/10.3389/fpsyg.2020.570017

Badovinac, S., Grubic, N., & Johri, A. M. (2020). Student mental health in the midst of the COVID-19 pandemic: A call for further research and immediate solutions. *International Journal of Social Psychiatry*, *66*(5), 517–518. https://doi.org/10.1177/0020764020925108

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*(2), 248–287. https://doi.org/10.1016/0749-5978(91)90022-L

Bandura, A. (1997). Editorial. *American Journal of Health Promotion*, *12*(1), 8–10. https://doi.org/10.4278/0890-1171-12.1.8

Bandura, A. (1999). Social cognitive theory: an agentic perspective. *Asian Journal of Social Psychology, 2*(1), 21–41. https://doi.org/10.1111/1467-839X.00024

Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, *3*(3), 265–299. https://doi.org/10.1207/S1532785XMEP0303_03

Bokayev, B., Torebekova, Z., Davletbayeva, Z., & Zhakypova, F. (2021). Distance learning in Kazakhstan: Estimating parents' satisfaction of educational quality during the coronavirus. *Technology, Pedagogy and Education*, *30*(1), 27–39. https://doi.org/10.1080/1475939x.2020.1865192

Brouwer, K., Walmsley, L., Parrish, E., McCubbin, A., Welsh, J., Braido, C., & Okoli, C. (2021). Examining the associations between self-care practices and psychological distress among nursing students during the COVID-19 pandemic. *Nurse Education Today*, *100*, 1-6. https://doi.org/10.1016/j.nedt.2021.104864

Browning, M. H., Larson, L. R., Sharaievska, I., Rigolon, A., McAnirlin, O., Mullenbach, L., ... & Alvarez, H. O. (2021). Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States. *PloS one*, *16*(1), e0245327. https://doi.org/10.1371/journal.pone.0245327

Bruffaerts, R., Mortier, P., Kiekens, G., Auerbach, R. P., Cuijpers, P., Demyttenaere, K., Green, J. G., Nock, M. K., & Kessler, R. C. (2018). Mental health problems in college freshmen: prevalence and academic functioning. *Journal of Affective Disorders*, *225*, 97–103. https://doi.org/10.1016/j.jad.2017.07.044

Chemers, M. M., Hu, L.-t., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology, 93*(1), 55–64. https://doi.org/10.1037/0022-0663.93.1.55

Chen, I. H., Chen, C. Y., Pakpour, A. H., Griffiths, M. D., & Lin, C. Y. (2020). Internet-related behaviors and psychological distress among schoolchildren during COVID-19 school suspension. *Journal of the American Academy of Child & Adolescent Psychiatry*, *59*(10), 1099–1102.e1. https://doi.org/10.1016/j.jaac.2020.06.007

Cheng, C., Wang, H. Y., & Ebrahimi, O. V. (2021). Adjustment to a "New Normal:" coping flexibility and mental health issues during the COVID-19 pandemic. *Frontiers in Psychiatry*, *12*. https://doi.org/10.3389/fpsyt.2021.626197

Dost, S., Hossain, A., Shehab, M., Abdelwahed, A., & Al-Nusair, L. (2020). Perceptions of medical students towards online teaching during the COVID-19 pandemic: A national cross-sectional survey of 2721 UK medical students. *BMJ Open*, *10*(11), 4–7. https://doi.org/10.1136/bmjopen-2020-042378

Dresel, M., Schmitz, B., Schober, B., Spiel, C., Ziegler, A., Engelschalk, T., ... & Steuer, G. (2015). Competencies for successful self-regulated learning in higher education: structural model and indications drawn from expert interviews. *Studies in Higher Education*, *40*(3), 454-470. https://doi.org/10.1080/03075079.2015.1004236

Freire, C., Ferradás, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., & Núñez, J. C. (2020). Coping strategies and Self-Efficacy in university students: A Person-Centered approach. *Frontiers in Psychology*, *11*, 1-11. https://doi.org/10.3389/fpsyg.2020.00841

Geitz, G., Brinke, D. J. T., & Kirschner, P. A. (2016). Changing learning behaviour: Self-efficacy and goal orientation in PBL groups in higher education. *International Journal of Educational Research*, *75*, 146–158 https://doi.org/10.1016/j.ijer.2015.11.001

Goldberg, Y., Mandel, M., Bar-On, Y. M., Bodenheimer, O., Freedman, L., Haas, E. J., ... & Huppert, A. (2021). Waning immunity after the BNT162b2 vaccine in Israel. *New England Journal of Medicine*, *385*(24), e85. https://doi.org/10.1056/NEJMoa2114228

Grøtan, K., Sund, E. R., & Bjerkeset, O. (2019). Mental health, academic self-efficacy and study progress among college students - The shot study, norway. *Frontiers in psychology*, *10*. https://doi.org/10.3389/fpsyg.2019.00045

Hashemi, A. (2021). Effects of COVID-19 on the academic performance of Afghan students' and their level of satisfaction with online teaching. *Cogent Arts & Humanities*, *8*(1), 3–19. https://doi.org/10.1080/23311983.2021.1933684

Heckel, C., & Ringeisen, T. (2019). Pride and anxiety in online learning environments: Achievement emotions as mediators between learners' characteristics and learning outcomes. *Journal of Computer Assisted Learning*, *35*(5), 667–677. https://doi.org/10.1111/jcal.12367

Hodges, C. B. (2008). Self-efficacy in the context of online learning environments: A review of the literature and directions for research. *Performance Improvement Quarterly*, *20*(3–4), 7–25. https://doi.org/10.1002/piq.20001

Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: a systematic review. *Educational Research Review*, *17*, 63–84. https://doi.org/10.1016/j.edurev.2015.11.002

Kashiwazaki, Y., Takebayashi, Y., & Murakami, M. (2020). Relationships between radiation risk perception and health anxiety, and contribution of mindfulness to alleviating psychological distress after the Fukushima accident: Cross-sectional study using a path model. *PLOS ONE*, *15*(7). https://doi.org/10.1371/journal.pone.023551

Kessler, R. C., Andrews, G., Colpe, L., Hiripi, E., Mroczek, D., Normand, S. L., Walters, E., & Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, *32*(6), 959–976. https://doi.org/10.1017/s0033291702006074

Khoshaim, H. B., Al-Sukayt, A., Chinna, K., Nurunnabi, M., Sundarasen, S., Kamaludin, K., Baloch, G. M., & Hossain, S. F. A. (2020). Anxiety level of university students during COVID-19 in Saudi Arabia. *Frontiers in Psychiatry, 11,* 1-7. https://doi.org/10.3389/fpsyt.2020.579750

Knight, L. K., & Depue, B. E. (2019). New frontiers in anxiety research: the translational potential of the bed nucleus of the stria terminalis. *Frontiers in psychiatry*, *10,* 1-7. https://doi.org/10.3389/fpsyt.2019.00510

Liang, L., Ren, H., Cao, R., Hu, Y., Qin, Z., Li, C., & Mei, S. (2020). The effect of covid-19 on Youth Mental Health. *Psychiatric Quarterly*, *91*(3), 841–852. https://doi.org/10.1007/s11126-020-09744-3

Lorant, V., Smith, P., Van den Broeck, K., & Nicaise, P. (2021). Psychological distress associated with the COVID-19 pandemic and suppression measures during the first wave in Belgium. *BMC Psychiatry, 21*(1), 1-10. https://doi.org/10.1186/s12888-021-03109-1

Moberg G. P. (1987). Problems in defining stress and distress in animals. *Journal of the American Veterinary Medical Association*, *191*(10), 1207–1211.

Muris, P., Schmidt, H., Lambrichs, R., & Meesters, C. (2001). Protective and vulnerability factors of depression in normal adolescents. *Behaviour Research and Therapy*, *39*(5), 555–565. https://doi.org/10.1016/s0005-7967(00)00026-7

Navarro-Mateu, D., Alonso-Larza, L., Gómez-Domínguez, M. T., Prado-Gascó, V., & Valero-Moreno, S. (2020). I'm not good for anything and that's why I'm stressed: analysis of the effect of self-efficacy and emotional intelligence on student stress using SEM and QCA. *Frontiers in Psychology*, *11*, 1-12. https://doi.org/10.3389/fpsyg.2020.00295

Odaci, H. (2011). Academic self-efficacy and academic procrastination as predictors of problematic internet use in university students. *Computers & Education*, *57*(1), 1109-1113. https://doi.org/10.1016/j.compedu.2011.01.005

Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia, M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry research*, *290*, 1-8. https://doi.org/10.1016/j.psychres.2020.113108

Pajares, F., & Valiante, G. (2002). Students'self-efficacy in their self-regulated learning strategies: a developmental perspective. *Psychologia*, *45*(4), 211-221. https://doi.org/10.2117/psysoc.2002.211

Petzold, M. B., Bendau, A., Plag, J., Pyrkosch, L., Mascarell Maricic, L., Betzler, F., Rogoll, J., Große, J., & Ströhle, A. (2020). Risk, resilience, psychological distress, and anxiety at the beginning of the Covid-19 pandemic in

Germany. *Brain and Behavior*, *10*(9), 1-10. https://doi.org/10.1002/brb3.1745
Qin, Z., Shi, L., Xue, Y., Lin, H., Zhang, J., Liang, P., Lu, Z., Wu, M., Chen, Y., Zheng, X., Qian, Y., Ouyang, P., Zhang, R., Yi, X., & Zhang, C. (2021). Prevalence and risk factors associated with self-reported psychological distress among children and adolescents during the Covid-19 pandemic in China. *JAMA Network Open*, *4*(1), 1-13. https://doi.org/10.1001/jamanetworkopen.2020.35487
Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: a systematic review and meta-analysis. *Psychological bulletin*, *138*(2), 353–387. https://doi.org/10.1037/a0026838
Ridner, S. H. (2004). Psychological distress: concept analysis. *Journal of advanced nursing*, *45*(5), 536-545. https://doi.org/10.1046/j.1365-2648.2003.02938.x
Ritchie, L., Cervone, D., & Sharpe, B. T. (2021). Goals and self-efficacy beliefs during the initial COVID-19 lockdown: a mixed methods analysis. *Frontiers in Psychology*, *11*, 1-11. https://doi.org/10.3389/fpsyg.2020.559114
Rodríguez-Hidalgo, A. J., Pantaleón, Y., Dios, I., & Falla, D. (2020). Fear of COVID-19, stress, and anxiety in university undergraduate students: a predictive model for depression. *Frontiers in Psychology, 11*, 1-9. https://doi.org/10.3389/fpsyg.2020.591797
Rosenman, R., Tennekoon, V., & Hill, L. G. (2011). Measuring bias in self-reported data. *International Journal of Behavioural and Healthcare Research*, *2*(4), 320-332. https://doi.org/10.1504/IJBHR.2011.043414
Saravanan, C., Mahmoud, I., Elshami, W., & Taha, M. H. (2020). Knowledge, anxiety, fear, and psychological distress about COVID-19 among university students in the United Arab Emirates. *Frontiers in Psychiatry*, *11*, 1-10. https://doi.org/10.3389/fpsyt.2020.582189
Sebastian, V. (2013). A theoretical approach to stress and self-efficacy. *Procedia - Social and Behavioral Sciences*, *78*, 556–561. https://doi.org/10.1016/j.sbspro.2013.04.350
Sharma, H. L. & Nasa, G. (2014). Academic self-efficacy: a reliable predictor of educational performances. *British Journal of Education, 2*(3), 57-64.
Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, *22*(9). https://doi.org/10.2196/21279
Sun, S., Goldberg, S. B., Lin, D., Qiao, S., & Operario, D. (2021). Psychiatric symptoms, risk, and protective factors among university students in quarantine during the COVID-19 pandemic in China. *Globalization and Health*, *17*(1). https://doi.org/10.1186/s12992-021-00663-x
Tee, M. L., Tee, C. A., Anlacan, J. P., Aligam, K. J. G., Reyes, P. W. C., Kuruchittham, V., & Ho, R. C. (2020). Psychological impact of COVID-19 pandemic in the Philippines. *Journal of Affective Disorders*, *277*, 379–391. https://doi.org/10.1016/j.jad.2020.08.043
Thompson, M. N., Her, P., Fetter, A. K., & Perez-Chavez, J. (2019). College student psychological distress: Relationship to self-esteem and career decision self-efficacy beliefs. *The Career Development Quarterly*, *67*(4), 282–297. https://doi.org/10.1002/cdq.12199
Uzun, K., & Karataş, Z. (2020). Predictors of Academic Self Efficacy: Intolerance of Uncertainty, Positive Beliefs about Worry and Academic Locus of Control. *International Education Studies, 13*(6), 104-116. https://doi.org/10.5539/ies.v13n6p104
Viertiö, S., Kiviruusu, O., Piirtola, M., Kaprio, J., Korhonen, T., Marttunen, M., & Suvisaari, J. (2021). Factors contributing to psychological distress in the working population, with a special reference to gender difference. *BMC public health*, *21*, 1-17. https://doi.org/10.1186/s12889-021-10560-y
Yokoyama, S. (2019). Academic Self-Efficacy and academic performance in online learning: A mini review. *Frontiers in Psychology, 9*, 1-4. https://doi.org/10.3389/fpsyg.2018.02794
Zimmerman, W. A., & Kulikowich, J. M. (2016). Online learning Self-Efficacy in students with and without online learning experience. *American Journal of Distance Education*, *30*(3), 180–191. https://doi.org/10.1080/08923647.2016.1193801
Zimmermann M, Bledsoe C, Papa A. (2020). The impact of the Covid-19 pandemic on college student mental health: A longitudinal examination of risk and protective factors. *Psychiatry research*, *305*, 1-9 https://doi.org/10.31234/osf.io/2y7hu

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