Mental Health and Coping Strategies among Faculty Members and Administrative Employees in a State University during the COVID-19 Pandemic

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ABSTRACT

This study examined the mental health and coping strategies among faculty members and administrative employees at the Polytechnic University of the Philippines, Manila. The descriptive-correlational method was utilized in the study and the data were collected online using the Google Form. The respondents were seven hundred eighty-eight (788) faculty members and administrative employees in the main campus of the University. The Depression, Anxiety, and Stress Scale (DASS) was used to determine the mental health while the SARS/ COVID Coping Strategies Instrument was employed to ascertain the coping used by the respondents during the pandemic. Results indicated that majority of the respondents (560 or 81.80%) experienced normal to mild depression while 64 or 8.10% reported severe to extremely severe level of depression. It also revealed that 612 or 77.70% of the respondents had normal to mild anxiety, and 114 or 14.40% felt severe to very severe anxiety. The respondents also disclosed that majority of them (696 or 88.30%) encountered normal to mild stress, while 54 or 6.80% experienced severe to very severe stress. The respondents utilized most of the coping strategies found the SARS/COVID coping instrument. Some of the coping strategies were significantly and positively associated with the dimensions of the mental health while the other coping strategies were found to be significantly but negatively associated with depression, anxiety, and stress of the respondents.

Key words: mental health, coping, depression, anxiety, stress

INTRODUCTION

The COVID-19 virus has posed serious threats to public health across the world. Aside from the physical health problems associated with the virus, it also posed unpleasant psychological effect to the lives of people in every corner of the globe. In 2019, the coronavirus SARS-CoV-2 was identified in Wuhan, China. By March 2020, the novel coronavirus causing COVID-19 disease caused a public health emergency and a global pandemic (Velayan, 2020). In response to the pandemic, numerous nations implemented

stay-at-home orders and placed restrictions on events, services, and social gatherings to slow the spread of the disease (Oksanen et al., 2020). The restriction with reinforced social distancing changed people's daily routines and circumstances abruptly, which is found to be challenging and psychologically demanding to many individuals.

The COVID-19 pandemic created rapid global change that affected the teaching world. In many countries, the situation was approached with strict confinement by closing educational establishments (De Bruin, et al., 2020). The field of education has experienced drastic changes including the adoption of remote learning. As a result, teachers have had to continue their job amid a series of circumstances and stressors that may have had a toll on their mental health state (Hidalgo-Andrade, et al., 2021). Teaching and non-teaching personnel have to adapt to the new normal where they need to meet their work requirements using the work from home setting.

Studies have shown that even at the beginning of the pandemic, teachers accumulated high levels of stress accompanied by symptoms of anxiety, depression, and sleep disturbance, particularly as a result of having to teach online (Besser et al., 2020).

Some studies have found that the use of Information and Communication Technologies (ICT) for working at home can create feelings of tension, anxiety, exhaustion, and decreased job satisfaction (Cuervo et al., 2018).

Several studies have indicated that people developed elevated depression, anxiety, and stress during pandemic.

Santamaria, et al. (2021) found that a high percentage of teachers have symptoms of stress, anxiety, and depression during the COVID-19 pandemic. Women showed significantly more symptoms of stress and anxiety than men, those who have children have more depressive symptoms than those who do not, and people with chronic pathology or those who live with others with chronic pathology have more stress, anxiety, and depression.

Jakubowski and Sitko-Dominik (2021) showed that the teachers experienced at least mild levels of stress, anxiety, and depression, both during the first as well as the second waves of the COVID-19 pandemic in Poland. It has been confirmed that there is a negative relation between relationship quality change and social relations quality change, and stress, anxiety, and depression. The variables which have been taken into consideration in the research have provided the explanation for the variation of stress—from 6% in the first stage of the research to 47% in the second stage; for the variation of anxiety—from 21% to 31%; and for the variation of depression—from 12% to 46%, respectively.

Usama, et al. (2021) explored the psychological distress among people residing in India during the lockdown. Four hundred and three (403) participants were asked to complete a questionnaire with questions focused on symptoms of depression, anxiety, stress, and family affluence. The results revealed that people who do not have enough supplies to sustain the lockdown were most affected, and family affluence was found to be negatively correlated with stress, anxiety, and depression. Among different professions, students and healthcare professionals were found to experience stress, anxiety, and depression more than others. Despite the current situation, stress, anxiety, and depression were found to be in normal ranges for mental health professionals highlighting their capabilities to remain normal in times of distress.

Early reports emerging in the literature have shown that between 40% and 50% of adults have experienced psychological distress following the COVID-19 outbreak (Favieri, et al. 2020), and that 30% of adults and children are at high risk for post-traumatic stress symptoms (Davico, et al., 2020).

Wang, et al. (2020) found an increased anxiety in nearly 30% of 1,210 participants, especially caused by worrying about family members. The same authors also reported longitudinal results, repeating the measures after 4 weeks in March 2020, and found no changes in the scores despite increased infection rates.

The findings of Ettman, et al. (2020) suggest that prevalence of depression symptoms in the US was more than 3-fold higher during COVID-19 compared with before the COVID-19 pandemic. Individuals with lower social resources, lower economic resources, and greater exposure to stressors (e.g., job loss) reported a greater burden of depression symptoms. Post COVID-19 plans should account for the probable increase in mental illness to come, particularly among at-risk populations.

A cross-sectional survey was conducted among adults (>18 years) in 11 countries (Brazil, Bulgaria, China, India, Ireland, North Macedonia, Malaysia, Singapore, Spain, Turkey, and United States). Mental health (anxiety, depression, resilient coping, hope) and other study data were collected between June-August, 2020. Of the 13,263 participants, 62.8% were female and 51.7% were 18-34 years old. Participants living in Brazil had the highest anxiety and depression symptoms while participants living in Singapore had the lowest. Greater personal COVID-19 exposure was associated with increased anxiety and depression symptoms, but country-level COVID-19 factors were not. Higher levels of hope were associated with reduced anxiety and depression; higher levels of resilient coping were associated with reduced anxiety but not depression. Substantial variations exist in anxiety and depression symptoms across countries during the COVID-19 lockdown, with personal COVID-19 exposure being a significant risk factor. Strategies that mitigate COVID-19 exposure and enhance hope and resilience may reduce anxiety and depression during global emergencies.

The research literature reveals that anxiety related to COVID-19 can disrupt workers' mental well-being and hinder work performance. A study found that higher COVID-19 anxiety and lower well-being at work during the pandemic are largely explained by psychological factors, including loneliness, psychological distress, technostress, and neuroticism. The unknown and dangerous virus has evoked worries and anxiety among people, which has led to increased psychological distress (Trougakos, et al., 2020).

Fernández, et al. (2020) found that gender (female), young age, high neuroticism, and fear related to COVID-19 were associated with higher emotional suffering during quarantine, while higher income and being married protected adults from emotional distress.

Dozois (2021) examined the depression and anxiety in Canada during the COVID-19 pandemic. In a nationally representative sample, findings revealed that participants anxiety with high to extremely high quadrupled (from 5% to 20%) and the number of participants with high self-reported depression more than doubled (from 4% to 10%) since the onset of COVID-19. The respondents also predicted that depression would worsen if physical distancing and self-isolation continue for another two months.

Studies also revealed that individuals used different strategies to be able to cope with the negative effects of COVID-19 pandemic.

Du, et al. (2020) conducted a study on mental health burden in different professions during the final stage of the COVID-19 lockdown in China using cross-sectional survey method. Results indicated that individuals considered vulnerable to depression during the final stage of the COVID-19 lockdown were the medical staff and the students. Doctors, nurses, and students were vulnerable to anxiety; and that the medical staff, students, and economy staff were found to be vulnerable to stress. Coping strategies were reduced to three factors: active, mental, and emotional. Being female and emotional coping were independently associated with depression, anxiety, or stress. Applying active coping strategies showed lower odds for anxiety while mental coping strategies showed lower odds for depression, anxiety, and stress. Age, being inside a lockdown area, exposure to COVID-19 at work, and having a high workload (8-12 hours per day) were not associated with depression, anxiety, or stress. WeChat was the preferred way of staying informed across all groups.

In a study on the positive impact of mindfulness meditation on mental health of female teachers during the COVID-19 outbreak in Italy, Matiz, et al. (2020) utilized the 8-week mindfulness-oriented meditation course, through two group meetings and six individual video-lessons that both high resilience and low resilience groups. The findings

revealed that pre-post MOM significant improvements were found in both groups in anxiety, depression, affective empathy, emotional exhaustion, psychological wellbeing, interoceptive awareness, character traits and mindfulness levels. Improvements in depression and psychological well-being were higher in the LR vs. HR group. It was concluded that mindfulness-based training can effectively mitigate the psychological negative consequences of the COVID-19 outbreak, helping in particular to restore wellbeing in the most vulnerable individuals.

One study surveying Chinese workers found that poor health status, drinking alcohol, and confirmed infections among one's family and friends or in the community increased the risk for developing anxiety and depression symptoms during the first months of the pandemic (Zhang, et al., 2020).

Studies have shown that meditation has been found to be effective in dealing with stress. Two decades since the introduction of mindfulness-based interventions (MBIs), research has shown that they could be effective in promoting well-being also when delivered through a single introductory group meeting, during which the meditation practices are taught and participants carry on the program individually (Mantzios, 2014) or when delivered via the internet (Spijkerman, et al., 2016). MBIs are therefore tools potentially suitable for dealing with stressors arising during lockdown periods, because they can help manage psychological suffering and they can be delivered even in situations where face-to-face meetings are suspended, and a large number of people need psychological support.

Religion and mental health have a complex relationship. Pargament, et al. (2012) described religious coping as a form of coping skill which utilizes religion in dealing with life adversities. Religious coping consists of positive and negative religious coping skills. Positive religious coping involves benefitting a favorable bond with God by praying or connecting to God during crises. On the other hand, negative religious coping refers to blaming God for one's own hardship. Positive and negative religious coping have been associated with higher and lower levels of psychological health, respectively.

Having a relative or friend infected with COVID-19 was reported as an important risk factor for the development of anxiety symptoms and living in town, having a steady income and social support, and living with the family were found as protective factors (Cao, et al. 2020).

According to the study of Kang, et al. (2020), 71.3% of the participants had subthreshold mental health disturbances and mild disturbances, 22.4% had moderate disturbances and 6.2% had severe disturbances. Women had higher mental health

disturbances. The majority of the participants had accessed psychological support through media and they saw these services as important resources to improve their psychological and physical health problems. Thus, providing psychological materials and resources for medical staff is very important during a pandemic.

Young, et al. (2021) indicated that older adults experienced less stress and less negative affect and used greater problem-focused coping and less avoidant coping in response to the pandemic than younger adults. Furthermore, age differences in affect and coping were partially accounted for by age differences in appraisals of the pandemic.

Other types of coping styles used during traumatic events by older adults can be divided into two categories: emotion-focused and problem-focused coping (Shenk et al., 2009). Emotion-focused coping mechanisms target reducing emotional suffering associated with stressful experiences, whereas problem-focused coping is centered on solving a problem by participating in activities to alter the situation (Yeung & Fung, 2007). In their SARS-related research, Yeung and Fung (2007) found that older adults were less likely to use problem-focused coping mechanisms but more likely to use emotion-focused coping strategies to cope with the epidemic-related stress.

Fuller and Huseth-Zosel (2021) conducted a study on initial coping of older adults during the COVID-19 pandemic. Participants rated their level of perceived coping and responded to open-ended questions about their daily life and coping. Results indicate that perceived coping level (on a scale from 1 to 10) was 7.9, with 87% of participants rating their coping positively. Primary themes that emerged included (a) staying busy, (b) seeking social support, and (c) having a positive mindset. These emotion-focused coping strategies appeared adaptive in the early weeks of the pandemic for most older adults.

Aziz Rahman, et al. (2021) found that the COVID-19 pandemic also led to maladaptive behaviors, including increasing smoking and alcohol intake due to stress and social isolation. The researchers have also found a significant association between increased smoking as well as alcohol drinking and higher psychological distress.

The level of mental health of employees in a private college was also studied. Velasco (2021) indicated that employees reported that they suffered mild anxiety and mild depression during the COVID-19 outbreak.

Objectives of the Study

The present study aimed to examine the mental health and coping of the faculty members and administrative employees at the Polytechnic University of the Philippines, Manila Campus, for the second semester, school year 2020-2021.

It also sought to determine whether a relationship exists between the variables of mental health and the coping of the respondents. Specifically, the study aimed to provide answers to the following questions:

- 1. What is the demographic profile of the respondents in terms of the following dimensions:
 - 1.1 Gender
 - 1.2 Employment Status
 - 1.3 Work classification?
- 2. How can the mental health of the respondents be described in terms of the following dimensions:
 - 2.1 Depression
 - 2.2 Anxiety
 - 2.3 Stress?
- 3. What is the level of the coping of the respondents as measured by the SARS/ COVID-19 coping strategies questionnaire?
- 4. Is there a significant relationship between the mental health and the coping of the respondents?

Hypothesis

1. There is no significant relationship between the mental health and coping of the respondents?

METHODS

Study Design

The present study utilized a descriptive-correlational study design in which the researchers are primarily interested in describing relationship between variables, without seeking to establish a causal connection. The respondents were selected using the convenience sampling method. Data were collected from seven hundred eighty-eight (788) respondents in the teaching and non-teaching personnel of the university. The study also employed an online survey in order to study the mental health and coping strategies of faculty members and administrative employees at the Polytechnic University of the Philippines. The respondents were asked to answer the questionnaires using the online platform google form.

Measures

The questionnaire will be derived from standardized instruments and will be structured into three major parts.

The first part asked for the demographic data (age, gender, employment status, work classification). The data will be taken using the demographic profile questionnaire. The second part will measure the mental health of the respondents. The depression, anxiety, and stress scale (DASS) was utilized to ascertain the mental health of the respondents. The scoring of the three dimensions of the DASS-21 is calculated as sum scores that have to be multiplied by two. The total depression subscale score was divided into normal (0-9), mild (10-13), moderate (14-20), severe (21-27), and extremely severe depression (28+). The anxiety subscale score was divided into normal (0-7), mild (8-9), moderate (10-14), severe (15-19), and extremely severe anxiety (20+). The total stress subscale score was divided into normal (0-14), mild (15-18), moderate (19-25), severe (26-33), and extremely severe stress (34+). Next, we grouped the levels of severity into normal–mild and moderate–extremely severe for each score. We decided to put mild symptoms into one group together with the normal level, since we considered mild symptoms of depression and anxiety to exist regardless of the pandemic.

Finally, the third part aimed at determining the coping strategies of the respondents. The researchers utilized the instrument SARS/COVID coping strategies used Du, et al. (2020) in their study Mental Health Burden in Different Professions During the Final Stage of the COVID-19 Lockdown in China. The items were developed specifically to measure how people cope with worldwide pandemic such as SARS and COVID-19 virus.

The responses were recorded using the frequency of use of the various coping strategies on a 4-point scale (1=almost never; 2=sometimes; 3=often; 4=almost always). Scores were translated into weighted mean and Interpretation was based on an arbitrary scale.

Data Analysis

The responses of the respondents were collected using the Google Form. Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 24. Descriptive statistics for the demographic characteristics were reported in numbers and percentages. They were processed and analyzed using SPSS 24. The researchers calculated descriptive statistics, rank, weighted mean, reported frequencies, and percentages. The Pearson Product Moment Correlation was used to explore the relationship between the variables of mental health and the coping strategies used by the respondents.

RESULTS

Table 1 Demographic Profile of the Respondents

Characteristics	Respondents, n (%)
Gender	
No answer Male Female	1 (0.1) 338 (42.9) 449 (57)
Work Classification	
Faculty Administrative Staff Faculty Designees	350 (44.4) 271 (34.4) 167 (21.2)
Employment Status	
Regular/Permanent Casual Temporary	430 (54.6) 264 (33.5) 94 (11.9)

Table 1 showed the demographic profile of the respondents according to gender, work classifications, and employment status. The sample included 788 respondents, 42,90% of whom were male and 57% were female. One respondent decided not to indicate his or her gender. The respondents consisted of faculty members (n=30, 44.4%), administrative staff (n=271, 34.4%), and faculty designees (n=167, 21.2%). As far as the employment status of the respondents, 430 or 54.6% are regular, 264 or 33.5% are casual, and 94 or 11.9% have temporary status.

Table 2 Mental Health of the Respondents in terms of Depression

	f	%
Normal	560	71.1
Mild	84	10.7
Moderate	80	10.2
Severe	29	3.7
Extremely Severe	3	4.4
Total	788	100

Table 2 presents the mental health of the respondents in terms of depression. As seen in the table, majority of the respondents, 560 or 71.1%, had normal level of depression while 84 or 10.7% and 80 or 10.2% experienced mild depression and moderate depression, respectively. This indicates that the respondents somehow do not necessarily

experience the negative feelings associated with dysphoria, hopelessness, devaluation of life, and anhedonia. There were 29 or 3.7% who showed severe level of depression and 3 or 4.4% with extremely severe depression. This denotes that 32 respondents experienced the unpleasant feelings related to inability to feel pleasure feeling of hopelessness, selfdeprecation, lack of interest or involvement.

Table 3 Mental Health of the Respondents in terms of Anxiety

	f	%
Normal	501	63.6
Mild	111	14.1
Moderate	62	7.9
Severe	42	5.3
Extremely Severe	72	9.1
Total	788	100

Table 3 shows the mental health of the respondents in terms of anxiety. Table reveals that 501 or 63.6% of the respondents encountered normal anxiety while 111 or 14.1% felt mild anxiety. Those who are exposed to moderate anxiety were 62 or 7.9% of the respondents. On the other hand, respondents who experience severe and extremely severe anxiety were 42 or 5.3% and 72 or 9.1%, respectively. The results denote that a total of 114 respondents is exposed to high level of autonomic arousal (breathing difficulty and experience trembling), skeletal muscle effects (sense of heart rate increase), and subjective experience of anxious affect (I felt scared without good reason).

Table 4 Mental Health of the Respondents in terms of Stress

	,	
	f	%
Normal	635	80.6
Mild	61	7.7
Moderate	38	4.8
Severe	38	4.8
Extremely Severe	16	2
Total	788	100

Table 4 reveals the mental health of the respondents in terms of the mental health dimension stress. As shown in the table, majority of the respondents, 645, or 80.6% experienced normal stress, 61 or 7.7% had mild stress, and 38 or 4.8% were confronted with moderate stress. The results also revealed that 54 or 6.8% of the respondents experienced severe to extremely severe stress. Respondents who are exposed to severe and extremely severe stress are more likely to exhibit characteristics such as difficulty in relaxing, being easily upset and irritable. They are likely to become over-reactive and impatient.

Table 5 Coping Strategies of the Respondents

COPI	Coping Strategies of the Respondents			
	Coping Strategies	Weighted mean	Verbal Interpretation	Rank
1.	Taking protective measures (washing hands, wearing a mask, taking one's own temperature, etc.)	3.77	Always	1
2.	Actively acquiring more knowledge about COVID-19 (symptoms, transmission pathway, etc.)	3.64	Always	2
3.	Changing one's thoughts and facing the situation with a positive attitude	3.62	Always	3
4.	Engaging in recreational activities (WeChat, Facebook, TikTok, online shopping, online movies, exercises)	3.39	Often	8
5.	Actively engaging into prayers to spare family members, friends, and co-workers from getting the virus.	3.53	Always	4
6.	Video chatting with family and friends by phone to share concerns and support.	3.42	Often	7
7.	Engaging in health-promoting behaviors (more rest, exercise, balanced diet, etc.)	3.44	Often	5
8.	Acquiring mental health knowledge and information	3.43	Often	6
9.	Practicing relaxation methods (meditation, yoga, Tai Chi, etc.)	2.57	Often	11
10.	Limiting oneself from watching too much news about COVID-19	2.63	Often	10
11.	Distracting oneself from thinking about COVID- issues by suppression or keeping busy	2.70	Often	9
12.	Venting emotions by crying, screaming, smashing things, and so on	1.57	Sometimes	12
13.	Using alcohol or drugs	1.30	Never	13

Table 5 discloses the coping strategies of the respondents during the COVID-19 pandemic. As revealed in the table, coping strategies "taking protective measures (mean =3.77)", "actively acquiring more knowledge about COVID-19 virus (mean =3.64)", "changing one's thoughts and facing the situation with a positive attitude", and "actively engaging into prayers to spare family members, friends, and co-workers from getting the virus" were all verbally interpreted as "Always." This means that the respondents usually utilized the four coping strategies to be able to deal with the COVID-19 virus. The results further indicate that 7 out of the 13 coping strategies were verbally interpreted as "Often" and that included "Engaging in recreational activities (WeChat, Facebooks, TikTok, online shopping, online movies, exercises, mean = 3.39)", "video chatting with family and friends by phone to share concerns and support (mean=3.42), "engaging in healthpromoting behaviors (more rest, exercise, balanced diet, etc., mean =3.44), "acquiring mental health knowledge and information (mean= 3.43)", "practicing relaxation methods (meditation, yoga, Tai Chi, etc., mean=2.57), "limiting oneself from watching too much news about COVID-19, (mean=2.63)" and "distracting oneself from thinking about COVID-19 issues by suppression or keeping busy (mean= 2.70)." This clearly demonstrates that oftentimes, the respondents use the seven coping strategies to better manage their feeling of apprehension and stress brought about by the COVID-19 pandemic. The respondents seldom use "venting emotions by crying, screaming, smashing things, and so on (mean=1.57, VI=sometimes) as a coping strategy." The respondents also indicated that they do not utilize the coping strategy "using alcohol or drugs (mean=1.30, VI=never)" when dealing with their worries about the COVID-19 virus.

Table 6 Relationship between the Mental Health and the Coping strategies of the Respondents

Coping	Depression	Anxiety	Stress
Taking protective measures (washing hands, wearing a mask, taking one's own temperature, etc	r=092,	r=-0.067,	r=-0.061,
	sig = 0.010	sig = 0.061	sig=0.084
Actively acquiring more knowledge about COVID-19 (symptoms, transmission pathway, etc.)	r=-0.06,	r=-0.053,	r=-0.067,
	sig = 0.094	sig = 0.134	sig = 0.059
Changing one's thoughts and facing the situation with a positive attitude	r=277,	r=194,	r=244,
	sig = .000**	sig = .000**	sig = .000**
Engaging in recreational activities (WeChat, Facebook, TikTok, online shopping, online movies, exercises)	r=103, sig = 0.004**	r=-0.069, sig = 0.054	r=103, sig = 0.004**
Actively engaging into prayers to spare family members, friends and coworkers from getting the virus.	r=157,	r=078,	r=151,
	sig = 0.000**	sig = 0.028*	sig = 0.000**

Coping	Depression	Anxiety	Stress
Video chatting with family and friends by phone to share concerns and support.	r=106,	r=-0.58,	r=111,
	sig = 0.003**	sig = 0.101	sig = 0.002**
Engaging in health-promoting behaviors (more rest, exercise, balanced diet, etc.)	r=223,	r=191,	r=249,
	sig = 0.000**	sig = 0.000**	sig = 0.000**
Acquiring mental health knowledge and information	r=125,	r=125,	r=160,
	sig = 0.000**	sig = 0.000**	sig =0.000**
Practicing relaxation methods (meditation, yoga, Tai Chi, etc.)	r=129,	r =093,	r=150,
	sig = 0.000**	sig = 0.009**	sig = 0.000**
Limiting oneself from watching too much news about COVID-19	r=.075,	r=065,	r=0.06,
	sig = 0.035*	sig = 0.067	sig = 0.095
Distracting oneself from thinking about COVID- issues by suppression or keeping busy	r=.071,	r=.070,	r=0.047,
	sig = 0.046*	sig = 0.048*	sig = 0.186
Venting emotions by crying, screaming, smashing things, and so on	r=.290, sig = 0.000**	r=.296, sig = 0.000**	r=.277, sig = 0.000**
Use of alcohol or drugs	r=0.052,	r=.074,	R=0.051,
	sig = 0.143	sig = 0.037*	sig = 0.151

Table 6 reveals the relationship between the coping strategies and mental health of the respondents. As shown in the table, there is a significant but negative relationship between the depression, anxiety, and stress and the following coping strategies of the respondents: (1) Actively acquiring more knowledge about COVID-19 (symptoms, transmission pathway, etc.), (2) Changing one's thoughts and facing the situation with a positive attitude, (3) engaging in recreational activities (WeChat, Facebook, TikTok, online shopping, online movies, exercises), (4) actively engaging into prayers to spare family members, friends and co-workers from getting the virus, (5) Video chatting with family and friends by phone to share concerns and support, (6) engaging in health-promoting behaviors (more rest, exercise, balanced diet, etc.), (7) acquiring mental health knowledge and information, and (8) practicing relaxation methods (meditation, yoga, Tai Chi, etc.). This establishes that as the level of depression increases, the different coping dimensions are less likely to be utilized by the respondents.

On the other hand, the results show that there is a significant positive correlation between the depression, anxiety, and stress of the respondents and the following coping strategies of the respondents: (1) limiting oneself from viewing COVID-19 news, (2) distracting oneself from thinking about COVID- issues by suppression or keeping busy, and (3) Venting emotions by crying, screaming, smashing things, and so on. This illustrates that

as the respondents experience higher anxiety, they will utilize the three strategies to be able to cope with the unpleasant effect of COVID-19 pandemic. There is also a significant relationship between anxiety and the coping "use of alcohol and drugs." This shows that the respondents are likely to use alcohol and drugs to cope with the effect of high anxiety.

DISCUSSION

This study sought to determine the mental health and coping strategies of the faculty members and administrative employees at the Polytechnic University of the Philippines. It also examined whether the dimensions of mental health are correlated to the coping dimensions of the respondents. The results demonstrated that 112 or 18.3% of the respondents experienced moderate to extremely severe depression, 176 or 22.3% had moderate to extremely severe anxiety, and 92 or 11.6 encountered moderate to extremely severe stress.

In our study, the magnitude of depression was consistent to the findings of Dozois (2021) indicating that anxiety was high to extremely high quadrupled (from 5% to 20%) and the number of participants with high self-reported depression more than doubled (from 4% to 10) since the onset of COVID-19 pandemic. Our findings also corroborate the work of Santamaria, et al. (2021) suggesting that a high percentage of teachers have symptoms of stress, anxiety, and depression during the COVID-19 pandemic. The prevalence of anxiety in our study is also consistent to the study of Wang, et al. (2020) which found an increased anxiety in nearly 30% of 1210 participants, especially caused by worrying about family members.

Our study shows that the participants used most of the coping strategies found in the SARS/COVID Coping Strategies Questionnaire. Our study revealed that 11 of the 13 coping strategies were utilized by the respondents which may suggest the need of the respondents to exhaust all available resources to manage the impact of the pandemic to their mental health. Our findings can also be explained by examining the study of Yeung and Fung (2007), which found that adults were less likely to use problem-focused coping mechanisms but are more likely use emotion-focused coping strategies to cope with the epidemic-related stress. This clearly highlights that while their findings (Yeung and Fung) indicated the use of emotion-focused coping of their respondents, our findings disclosed that both problem-focused strategy (i.e., Taking protective measures such as washing hands, wearing a mask, taking one's own temperature, etc.), and emotion-focused coping (i.e., Changing one's thoughts and facing the situation with a positive attitude, actively engaging into prayers, and engaging in health-promoting behaviors) were employed by our respondents. Our results also evidently reinforce the work of Young, et al. (2021), which indicated that older adults experienced less stress and less negative affect and used greater problem-focused coping and less avoidant coping in response to the pandemic than younger adults.

Our findings also suggest the three dimensions (depression, anxiety, and stress) are significantly but negatively correlated to the seven coping strategies of the respondents while three coping styles are significantly and positively associated with the three dimensions of the mental health. The results of our study also confirm the study of Aziz Rahman, et al. (2021), which found that the COVID-19 pandemic also led to maladaptive behaviors, including increasing smoking and alcohol intake due to stress and social isolation. They have also uncovered a significant association between increased smoking as well as alcohol drinking with higher psychological distress.

To be able to help in handling the negative impact of the pandemic to the mental health of the faculty and administrative employees, the PUP administration offered e-counseling services through the offices of the Guidance and Counseling and Psychological Services, the College of Social Sciences and Development, Department of Psychology, and the Graduate School, Master of Arts in Psychology Program. The psychologists and counselors maintain their lines open to allow the faculty members and administrative employees to share their concerns relative to the effect of the pandemic to their mental health and psychological well-being.

REFERENCES

- Besser A, Lotem S and Zeigler-Hill V (2020) Psychological stress and vocal symptoms among university professors in Israel: implications of the shift to online synchronous teaching during the COVID-19 pandemic. Journal of Voice Official Journal of Voice Foundation.
- Cao W, Fang Z, Hou G, Han M, Xu X, Dong J et al. (2020). The psychological impact of the COVID-19 epidemic on college students in China. Psychiatry Research.
- Cuervo, T.C., Orviz, N.M., Arce, S.G., & Fernández, I.S. (2018). Technostress in communication and technology society: scoping literature review from the Web of science. Archivos Prevencion Riesgos Laborales.
- Davico, C., Ghiggia, A., Marcotulli, D., Ricci, F., Amianto, F., & Vitiello, B. (2020). Psychological impact of the COVID-19 pandemic on adults and their children in Italy. Lancet.
- De Bruin, Y.B.; Lequarre, A.-S.; McCourt, J.; Clevestig, P.; Pigazzani, F.; Jeddi, M.Z.; Colosio, C.; Goulart, M. (2020). Initial impacts of global risk mitigation measures taken during the combatting of the COVID-19 pandemic. Safety Science.
- Dozois, D. J. (2021). Anxiety and depression in Canada during the COVID-19 pandemic: A national survey. Canadian Psychology.

- Du, J., Mayer, G., Hummel S., Oetjen, N., Gronewold, N., Zafar, A., & Schultz, J.(2020). mental health burden in different professions during the final stage of the COVID-19 lockdown in China: A cross-sectional survey study. Journal of Medical Internet Research.
- Ettman, C.K., Abdalla, S.M., Cohen, G.H., et al. (2020). Prevalence of Depression Symptoms in US Adults before and during the COVID-19 Pandemic. Public Health.
- Favieri, F., Forte, G., Tambelli, R., & Casagrande, M. (2020). The Italians in the time of coronavirus: Psychosocial aspects of unexpected COVID-19 pandemic. Lancet
- Fuller, H., & Huseth-Zosel, A. (2021). Lessons in Resilience: Initial coping among older adults during the COVID-19 pandemic. The Gerontologist.
- Jakubowski, T.D., & Sitko-Dominik, I.D. (2021) Teachers' mental health during the first two waves of the COVID-19 pandemic in Poland. Institute of Psychology. Faculty of Social Sciences, University of Silesia, Katowice, Poland.
- Mantzios, M., & Giannou, K. (2014). Group vs. single mindfulness meditation: Exploring avoidance, impulsivity, and weight management in two separate mindfulness meditation settings. Applied Psychology, Health, and Well Being.
- Matiz, A., Fabbro, F., Paschetto, A., Cantone, D., Paolone, A. R., & Crescentini, C. (2020). Positive impact of mindfulness meditation on mental health of female teachers during the COVID-19 outbreak in Italy. International Journal of Environmental Research and Public Health.
- Oksanen, A., Kaakinen, M., Latikka, R., Savolainen, I., Savela, N., & Koivula, A. (2020). Regulation and Trust: 3-Month Follow-up Study on COVID-19 Mortality in 25 European Countries. JMIR Public Health and Surveillance.
- Pargament, K.I.; Tarakeshwar, N.; Ellison, C.G.; & Wulff, K.M. (2012). Religious coping among the religious: The relationships between religious coping and well-being in a national sample of Presbyterian clergy, elders, and members. Journal for the Scientific Study of Religion.
- Trougakos, J.P., Chawla, N., & McCarthy, J.M. (2020). Working in a pandemic: Exploring the impact of COVID-19 health anxiety on work, family, and health outcomes. Journal of Applied Psychology.
- Santamari, M. D., Mondragon, N. I., Santxo, N. B., & Ozamiz-Etxebarria (2021). Teacher stress, anxiety and depression at the beginning of the academic year during the COVID-19 pandemic. Global Mental Health.

- Shenk, D., Ramos, B., Kalaw, J., & Tufan, I. (2009). History, memory, and disasters among older adults: A life course perspective. Traumatology.
- Spijkerman, M.P.J., Pots, W.T.M., Bohlmeijer, E.T. E., (2016). Effectiveness of online mindfulness-based interventions in improving mental health: A review and metaanalysis of randomised controlled trials. Clinical Psychology Review.
- Usama, R., Mohammad, S., Khan, N.H., Kharshiing, K.D., & Masrat, K. (2021). Depression, anxiety, and stress among Indians in times of COVID-19 Lockdown. Community Mental Health Journal.
- Velavan, T.P, & Meyer, C.G.(2020). The COVID-19 epidemic. Tropical Medicine and International Health.
- Velasco, M., S. (2021). COVID-19 Pandemic: Psychological Impact to Employees of a Private College in the Philippines. Global Education and Social Sciences Journal.
- Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. (2020). Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China. International Journal of Environmental Research and Public Health
- Yeung, D.Y. & Fung, H. H. (2007). Age differences in coping and emotional responses toward SARS: A longitudinal study of Hong Kong Chinese. Aging and Mental Health.
- Young, N. A., Waugh, C. E., Minton, A. R., Charles, S. T., Haase, C. M., Mikels, J. A. (2021) Reactive, Agentic, Apathetic, or Challenged? Aging, emotion, and coping during the COVID-19 pandemic. The Gerontologist.
- Zhang, X.-R., Qing-Mei Huang, Q.-M., Wang, X.-M., Cheng, X., Li, Z.-H., Wang, Z.-H.;, Zhong, W.-F., Liu, D., Shen, D., & Chen, P.-L. (2020). Prevalence of anxiety and depression symptoms, and association with epidemic-related factors during the epidemic period of COVID-19 among 123,768 workers in China: A large cross-sectional study. Journal of Affective Disorders.

APPENDICES

- 1. Taking protective measures (washing hands, wearing a mask, taking one's own temperature, etc)
- 2. Actively acquiring more knowledge about COVID-19 (symptoms, transmission pathway, etc)
- 3. Changing one's thoughts and facing the situation with a positive attitude
- 4. Engaging in recreational activities (WeChat, Facebook, TikTok, online shopping, online movies, exercises)
- 5. Actively engaging into prayers to spare family members, friends and coworkers from getting the virus.
- 6. Video chatting with family and friends by phone to share concerns and support.
- 7. Engaging in health-promoting behaviors (more rest, exercise, balanced diet, etc)
- 8. Acquiring mental health knowledge and information
- 9. Practicing relaxation methods (meditation, yoga, Tai Chi, etc)
- 10. Limiting oneself from watching too much news about COVID-19
- 11. Distracting oneself from thinking about COVID-19 issues by suppression or keeping busy
- 12. Venting emotions by crying, screaming, smashing things, and so on
- 13. Using alcohol or drugs

Other coping st	trategies used (Ple	ease indicate):_	
		_	

All items will be used but the researchers decided that religious coping be included in the measurement of coping strategies.