

Mediating Effect of Psychological Capital on The Relationship Between COVID-19 Stress and The Organizational Commitment Among Nurses in Davao City, Philippines

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Abstract

Background: The COVID-19 pandemic has abruptly caused heightened levels of stress among nurses globally, which in turn affected their organizational commitment. Interest on studying the effect of psychological capital on these variables is considered for its close links to organizational success.

Purpose: This study determined the mediating effect of psychological capital (PC) on the relationship between COVID-19 stress (CS) and organizational commitment (OC) among nurses working in Davao City.

Methods: Using descriptive-correlational design, the mediating effect of PC on the relationship between CS and OC among nurses in Davao City was determined. Snowball sampling was utilized to recruit 225 respondents. The data were gathered using COVID-19 stress scale, Psychological Capital Questionnaire, and Organizational Commitment Scale. Mean, standard deviation, Pearson r , regression analysis, and Sobel test were used in the statistical analysis.

Results and Conclusion: Respondents had high levels of CS ($M=3.73$, $SD=0.89$), very high levels of PC ($M=4.43$, $SD=0.56$), and high levels of OC ($M=3.42$, $SD=0.56$). CS was correlated with PC ($p<0.001$; $r=0.48$) and OC ($p<0.001$; $r=0.59$); as do PC and OC ($p<0.001$; $r=0.44$). Furthermore, CS was a statistically significant predictor of OC ($\beta=.372$, $p<.001$). Upon inclusion of PC, CS continued to influence OC ($\beta=0.209$, $p<0.001$). CS also significantly influenced PC ($\beta=0.294$, $p<0.001$). PC partially mediated the relationship between CS and OC ($Z=3.159$, $p=0.002$).

Implications for Practice: The interrelationship among the variables is multifaceted. Organizations are encouraged to maximize psychological capital of nurses to enhance their organizational commitment despite being exposed to heightened COVID-19 stress.

Keywords: Health, COVID-19 Stress, Organizational Commitment, Psychological Capital, Descriptive-Correlational, Davao City

1. INTRODUCTION

The pandemic brought about by the COVID-19 infection has affected healthcare instantaneously, negatively affecting the economy and the personal lives of people in a global scale. Starting from its first known cluster of cases in Wuhan, China in November 2019 (Bloom et al., 2021), the infection has relentlessly spread throughout the world, causing unprecedented numbers of deaths worldwide. Estimates from the World Health Organization (WHO, 2022) show that the full death toll associated directly or indirectly with the COVID-19 pandemic between 1 January 2020 and 31 December 2021 was approximately 14.9 million. In the Philippines, as of December 21, 2021, the number of COVID-19 cases reached 2,837,719, while the deaths tallied to 50,794 cases (CNN Philippines, 2021; Department of Health, 2022).

Apart from the grueling number of morbidity and mortality cases attributed to COVID-19, the general population had to live through heightened degrees of stress while battling the pandemic. Recent research from China indicates that in response to COVID-19, over 25% of the general population encountered symptoms of anxiety or tension that were moderate to severe in intensity (Qiu et al., 2020; Wang et al., 2020). The results presented in this study are comparable to those documented throughout the 2009 H1N1 pandemic and the SARS outbreak (Cheng et al., 2004; Rubin et al., 2009; Wheaton et al., 2011). Research on past pandemics and epidemics has demonstrated that anxiety, or the absence thereof, significantly influences human behavior (Taylor, 2019). Individuals who experience insufficient levels of anxiety regarding a potential viral outbreak demonstrate reduced propensity to practice preventive measures such as handwashing, comply with physical distancing instructions, and receive available vaccines (Taylor, 2019). Conversely, individuals afflicted with extreme anxiety are more prone to participating in socially disruptive activities—such as engaging in panic purchasing or unnecessarily storming into healthcare facilities and clinics in the mistaken belief that minor ailments indicate a severe infection (Asmundson & Taylor, 2020a, 2020b).

Additionally, clinical observations and research (Taylor, 2019) indicate that in times of pandemic, a significant number of individuals display fear and anxiety-related distress responses. These include the following: disease-related xenophobia, which pertains to apprehensions about foreigners carrying the disease; fear of the socio-economic repercussions of the pandemic, such as job loss; compulsive checking and reassurance; and apprehension regarding the risk of contracting the disease. In light of the fact that anxiety and stress influence behavioral reactions to viral outbreaks—behaviors that can either impede or promote the transmission of infection—it is imperative that health officials, public health decision-makers, and healthcare providers comprehend the characteristics and extent of detrimental psychological reactions to the ongoing COVID-19 pandemic. Consequently, an examination of stress related to the pandemic is crucial.

Furthermore, it is critical to mention that this strain did not solely affect the general population; it also had an impact on healthcare practitioners, including nurses, who were tasked with managing the pandemic. The nurses' psychological well-being was significantly impacted by the COVID-19 pandemic, as evidenced by reports of heightened emotional exhaustion and a higher prevalence of posttraumatic stress disorder among those who provided care for COVID-19 patients (Hu et al., 2020; Li et al., 2020). Additionally, anxiety, insomnia, and depression are examples of psychological disorders that hospital nurses have been observed to exhibit (Lai et al., 2020). Additionally, De Pedro et al. (2021) emphasized that healthcare professionals are not exempt from this stress in the context of the COVID-19 pandemic in the workplace. This stress is primarily attributable to events that occur in the workplace,

such as inadequate resources, a hefty workload, work pressure, and a high risk of infection. It is especially prevalent among nurses. Furthermore, it was observed that these difficulties had an impact on the psychological well-being of healthcare personnel, leading to burnout, which is defined as persistent, unrelenting stress (Zaghini et al., 2020). Unsurprisingly, this abrupt escalation in work obligations and stressors has resulted in a decline in both employee job satisfaction and organizational commitment (Nia et al., 2021). It is critical to prioritize organizational commitment due to the correlation between inadequate levels of organizational commitment among nurses and unfavorable job consequences, including nursing errors, substandard care, and high rates of staff attrition (Gillet et al., 2018).

For many years, employers have delved into the importance of psychological capital to evaluate the personal and professional resources of their staff on how they combat work challenges. Psychological capital, one of the resources that could be framed in Conservation of Resources Theory (Siu, 2013; Vîrgă et al., 2020), has been proposed as a useful personal resource for coping with work stress (Abbas & Raja, 2015; Rabenu et al., 2016), mobbing (Cassidy et al., 2014), burnout (Ko et al., 2013), or even unemployment (Chen & Kim, 2012; Fernández-Valera, 2020). Nguyen and Ngo (2020) added that incorporating psychological capital in the advent of stress and commitment issues has proven to provide positive effects as they have found positive correlations between psychological capital and organizational commitment. At the time of this study, however, there has been little empirical attention devoted to determining the interrelationship between COVID-19 stress, psychological capital, and organizational commitment in the Philippines and in Davao City, much less the identification of the mediating effect of psychological capital on the presumed relationship between COVID-19 stress and organizational commitment.

In order to address this gap, the purpose of this research was to ascertain the levels of psychological capital, organizational commitment, and COVID-19 stress among nurses working in Davao City, Philippines, during the height of the pandemic. Additionally, the researchers aimed to investigate the interrelationships between these variables and determine whether or not psychological capital acts as a mediator between organizational commitment and COVID-19 stress. The outcomes of this research could potentially guide the design of interventions that target to enhance the psychological capital of nurses in order to mitigate the adverse effects of COVID-19 stress on their dedication to the organization. Enhancing organizational commitment among nurses is of paramount importance in order to sustain a stable workforce, raise job satisfaction, and ultimately improve the quality of patient care, particularly during the challenging period of the healthcare environment precipitated by the pandemic. Additionally, it is possible that research on the mediating role of psychological capital between organizational commitment and COVID-19 stress among nurses can make a valuable contribution to the fields of nursing, psychology, and organizational behavior. It has the potential to improve theoretical understanding and inspire additional investigation in associated fields, ultimately yielding advantages for both academia and practice.

2. MATERIALS AND METHODS

Design and Participants

The researchers employed descriptive-correlational design in determining the levels of COVID-19 stress, psychological capital, and organizational commitment of the respondents and the interrelationship among these variables. Through mediation analysis, the study also determined if psychological capital significantly mediated the relationship between COVID-19 stress and organizational commitment or not.

Nurses from both private and public hospitals were chosen as respondents of the study through snowball sampling. Nurses who had been exposed or handled COVID-19 positive, suspected, or probable patients for at least one year and were employed in hospitals in Davao City were selected. A total of 225 respondents were recruited for the study. A sample size of 225 was deemed appropriate to achieve 80% power for Sobel test following the recommendations by Montoya, et al. (2021) on power analysis mediation models. Normal distribution was assured prior to analysis through looking at the Normal P-P plot of regression standardized residuals. In this study, the values followed linearity, thus assuming a normal distribution.

Setting

The study was set in various Levels 1 to 3 hospitals in Davao City, Philippines per Department of Health (DOH) classification. At the time of this study, the COVID-19 pandemic was at its height in Davao City, and the selected levels 2 and 3 healthcare facilities were tasked to cater to moderate to severe cases of COVID-19 patients as per Southern Philippines Medical Center - One Hospital Command Center (SPMCOHCC) guidelines. In addition, the selected level 1 healthcare facility in this study was also tasked to serve as an “Infirmaries or Temporary Treatment and Monitoring Facilities (TTMF)” facility. These facilities admitted probable and confirmed COVID-19 positive patients who were clinically recovered or stable – i.e., mild or moderate COVID-19 cases – and are for completion of 14-day quarantine protocol or waiting for a repeat test (Department of Health, 2020).

Measures

The study used three sets of adopted standardized research questionnaires to measure COVID-19 stress, psychological capital, and organizational commitment. To measure COVID-19 stress, the COVID-19 stress scale by Taylor et al. (2020) was used (Cronbach’s $\alpha = 0.80$). This questionnaire consisted of 36 items and are categorized into 5 subscales, namely: COVID danger and contamination fears, COVID fears about economic consequences, COVID xenophobia, COVID compulsive checking and reassurance seeking, and COVID traumatic stress symptoms. The responses ranged from 1 = Not at All to 5 = Extremely.

To measure psychological capital, the new Psychological Capital Questionnaire (PCQ) by Sapyaprapa et al. (2013) was utilized (Cronbach’s $\alpha = .95$). This instrument is composed of 24 items which are further subdivided into four components namely, work self-efficacy (items 1-6); optimism (items 7-12); hope (items 13-18); and resilience (items 19-24). The Cronbach’s α coefficients of the four subscales were as follows: work self-efficacy (Cronbach’s $\alpha = 0.087$); optimism (Cronbach’s $\alpha = 0.80$); hope (Cronbach’s $\alpha = 0.84$); and resilience (Cronbach’s $\alpha = 0.86$). For this study, the responses ranged from 1 = Strongly Disagree to 5 = Strongly Agree.

To measure organizational commitment, the Organizational Commitment Scale by Mayer and Allen (1993) was employed. This tool has 6 items in each of the following dimensions: affective commitment scale (Cronbach’s $\alpha = 0.87$), continuance commitment scale (Cronbach’s $\alpha = 0.75$), and normative commitment scale (Cronbach’s $\alpha = 0.83$). For this study, the responses ranged from 1 = Strongly Disagree to 5 = Strongly Agree.

Ethical Considerations

The ethical soundness of this study was approved by the Technical Panel of the Master of Arts in Nursing (MAN) Program of Davao Doctors College, Inc. The approval to conduct the study from the MAN Program Chair of the Davao Doctors College, Inc. was obtained prior to data gathering. The

informed consent was also obtained from the research respondents prior to commencing the data gathering.

Respondents who willingly consented to participate after thoughtful consideration of the nature of the study were the only ones allowed to participate in this study. Prior to the data gathering, the respondents were fully informed about the nature of the study, its purpose, the likely benefits, and risks associated with their participation, and their rights as respondents of this study – which includes, but not limited to, the right to refuse from participating and to withdraw anytime from participating from this study, and right to privacy and confidentiality electronically. Respondents were informed that they could withdraw their participation at any time should they wish regardless of reason. All collected information was kept privately and confidentially. Only the principal investigators gained access to the information provided by the respondents. The statistician only had access to the data required for the data analysis.

Procedures

After being permitted to conduct the study, the researchers recruited respondents who fit the respondent characteristic for this study. Information about the study were provided to the potential respondents, including information about what the study is about, its purpose, study procedures, potential benefits and risks, and data privacy and confidentiality clause. Those who fit the respondent characteristic were also asked if they can refer someone who fit the same characteristic as required for this study. Research information, including the researcher contact info, was provided to these referred potential respondents. The potential respondents were screened by the researchers for eligibility and were then requested to participate once deemed eligible. Communications were done through Messenger chat or via email. Clarifications about any information about the study were done via video call, phone call, or Messenger chat.

Upon agreeing to participate in the study, the respondents were asked to sign an informed consent form electronically. Survey questionnaires, validated by three research experts, were then distributed to the respondents via Google Forms. The survey took approximately about 30 minutes to an hour to complete. The entire data gathering was done electronically as it was in the height of the COVID-19 pandemic in the Davao City, Philippines when the study was conducted – i.e., March 2022 to May 2022. Afterwards, the collected data were submitted to a research statistician for analysis.

Data Analysis

Mean and standard deviation were used to determine the levels of psychological capital, COVID-19 stress, and organizational commitment, and the homogeneity and heterogeneity of the respondents' responses. Pearson's product-moment correlation coefficient was used to determine the significance of interrelationships of the variables. Multiple regression analysis was carried out to ascertain the influence of one variable on another. The Sobel test was used to determine the mediating effect of psychological capital on the relationship between COVID-19 stress and organizational commitment. Microsoft Excel and IBM SPSS version 26 were used for the data analysis. Conclusions and recommendations were drawn based on the results.

3. RESULTS

Means and Correlations

Table 1 shows that, overall, the nurses had a high level of COVID-19 stress ($M = 3.73$, $SD=0.89$), high level of organizational commitment ($M = 3.42$, $SD=0.56$), and very high level of psychological capital ($M = 4.43$, $SD=0.55$). In addition, there were positive correlations between the COVID-19 stress and

organizational commitment ($r=0.59, p<0.001$), psychological capital and organizational commitment ($r=0.44, p<0.001$), and COVID-19 stress and psychological capital ($r=0.48, p<0.001$). These findings suggest that, for every amount increase in COVID-19 stress, the value of organizational commitment significantly increases by 0.59; for every amount increase in psychological capital, the value of organizational commitment significantly increases by 0.44; and for every amount increase in COVID-19 stress, the value of psychological capital significantly increases by 0.48, respectively.

Table 1 Means and Correlations

Variable	Mean	SD	Correlations			
			Organizational Commitment	Psychological Capital	COVID-19 Stress	Significance
COVID-19 Stress	3.73	0.89	0.59	-	-	$p < 0.001$
Organizational Commitment	3.42	0.56	-	0.44	-	$p < 0.001$
Psychological Capital	4.43	0.55	-	-	0.48	$p < 0.001$

Legend: 1.00-1.79 – Very Low; 1.80-2.59 – Low; 2.60-3.39 – Moderate; 3.40-4.19 – High; 4.20-5.00 – Very High

Mediation Analysis on the Effect of Psychological Capital on the Relationship between COVID-19 Stress and Organizational Commitment

Table 2 and Figure 1 present the findings of the mediation analysis. To facilitate the mediation process, several measures were implemented to ensure that the psychological capital operated as a mediator. The first step of the analysis examined the relationship between COVID-19 stress (CS), serving as the independent variable, and organizational commitment (OC), serving as the dependent variable. Next, in step 2, the relationship between the independent variable, COVID-19 stress, and the mediator variable, psychological capital (PC), was examined. The third step involved the utilization of multiple regression analysis to examine the predictive relationship between COVID-19 Stress (independent variable) and psychological capital (manipulated variable) on organizational commitment (dependent variable).

Subsequently, a mediation analysis was performed utilizing the Sobel test. Findings presented in step 3 (denoted as c') show that the total effect of COVID-19 stress on organizational commitment (from path c: 0.37) reduced when mediated by psychological capital (to path c': 0.31). To calculate the indirect effect of organizational commitment, it is necessary to multiply the unstandardized beta coefficients of path a and path b. The findings indicate that the indirect impact is 0.061446, calculated as the product of variables a and b ($0.294 * 0.209$).

The findings from the simple linear regression analysis indicate that COVID-19 stress was a statistically significant predictor of organizational commitment ($\beta = 0.372, SE = 0.034, t = 10.979, p = <0.001$). Subsequently, upon inclusion of psychological capital, the mediating variable, in the regression analysis, COVID-19 stress continued to have a significant predictive effect on organizational commitment ($\beta = 0.209, SE = 0.061, t = 3.436, p = <0.001$). The study also found that COVID-19 stress was a significant predictor of psychological capital ($\beta = 0.294, SE = 0.036, t = 8.066, p = <0.001$).

Furthermore, the findings of Sobel test confirmed that psychological capital significantly mediates the relationship between COVID-19 stress and organizational commitment ($Z = 3.159, p = <0.001$). It is further observed that only partial mediation is achieved as evidenced by the regression coefficient in the final stage analysis, which is significantly reduced to 0.311 but still retains its significance. This suggests that a portion of the relationship between COVID-19 stress and psychological capital is mediated. However, it is important to note that the remaining portion of the relationship is either directly influenced or mediated by variables that were not included in the current model or study.

Table 2 Mediation Analysis on the Effect of Psychological Capital on the Relationship between COVID-19 Stress and Organizational Commitment

Variables	b	SE	t	p	95% Confidence Interval	
					Lower Bound	Upper Bound
Step 1: CS → OC	0.372	0.034	10.979	p < 0.001	0.305	0.439
Step 2: CS → PC	0.294	0.036	8.066	p < 0.001	0.222	0.365
Step 3: CS → PC → OC	0.209	0.061	3.436	p < 0.001	0.089	0.329

Legend: CS = COVID-19 Stress; OC = Organizational Commitment; PC = Psychological Stress

Note: $Z = 3.159; p < 0.01$ (significant)

Mediation Analysis: Sobel Test 3.159 (p-value = 0.002)

Effect Measures: Total Effect: 0.37; Direct Effect: 0.31; Indirect Effect: 0.06 ($a*b$ or $0.294*0.209$)

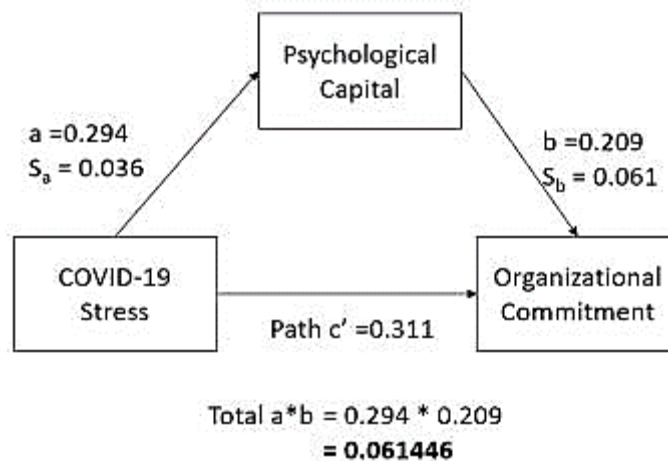


Figure 1 Mediation Analysis on the Effect of Psychological Capital on the Relationship between COVID-19 Stress and Organizational Commitment

4. DISCUSSION

The current study investigated the levels of COVID-19 stress, psychological capital, and organizational commitment of nurses working in Davao City during the COVID-19 pandemic. It also investigated the

mediating role of psychological capital on the relationship between COVID-19 stress and organizational commitment. In general, the surveyed nurses working in public and private hospitals in Davao City at the time of this study had high levels of COVID-19 stress. The study further found that, among the many factors of COVID-19 stress, danger was the highest attributed reason for this concern. This implies that the respondents were stressed because they were worried about catching the virus, that they cannot keep their family safe from the virus, that the healthcare system won't be able to protect their loved ones, and that basic hygiene such as handwashing nor social distancing won't be enough to keep them safe from the virus.

Several studies agree that fear from danger during the pandemic was a common and expected occurrence not only for the public but also for the healthcare professionals. Dymecka et al. (2021), for one, in their study on the fear of COVID-19, risk perception and stress level in Polish nurses during the COVID-19 outbreak, revealed that the main source of concern for nurses during the COVID-19 pandemic was the fear of being infected or unknowingly infecting others. Yoruk et al. (2022) added that traumatic stress is rampant among COVID-19 healthcare workers when it is correlated with the fear of contagion and infecting family members. This concern, Wang et al. (2020) added, made healthcare workers suffer from undue pressure. Shanafelt et al. (2020), added to this, stating this cause of stress is one of the eight sources of anxiety, which are as follows: lack of access to appropriate personal protective equipment, being exposed to COVID-19 at work and taking the infection home to their family, not having rapid access to testing if they develop COVID-19 symptoms and concomitant fear of propagating infection at work, uncertainty that their organization will support/take care of their personal and family needs if they develop infection, limited to no access to childcare during increased work hours and school closures, lack of support for other personal and family needs as work hours and demands increase such as food, hydration, lodging, transportation, uncertainty of being able to provide competent medical care if deployed to a new area (e.g., non-ICU nurses having to function as ICU nurses), and lack of access to up-to-date information and communication.

In contrast, Mo, et al. (2020) showed that the pressure load of the nurses in Hubei was at a moderately low level. This implies that being prepared mitigates the levels of stress among nurses. In their study, their respondents attributed their moderately low level of stress to the high level of conscientiousness and preparation. It was highlighted that majority of their respondents had working experiences in related departments such as fever clinic, infection department, respiratory and critical medicine department, critical medicine department and emergency department; and were also trained in the prevention and control of COVID-19 in the hospital. The study further explicated that their respondents took the initiative to ask for support and treatment from their management and have received support and encouragement from their loved ones. These imply managerial and familial support are essential in mitigating the effects of stress at a crucial time of work such as the COVID-19 pandemic.

Moreover, despite this study being conducted while the pandemic is still ongoing in the research setting, the present study found that the surveyed nurses had high levels of organizational commitment. Among the three types of commitment, continuance commitment, which refers to the extent to which employees feel the need to stay at their organization (Van der Werf, 2020), was found to be type of commitment with the highest composite score. This implies that the respondents were committed to their organization as a matter of necessity. This may also imply that they have perceived that it would be difficult for them to leave even if they wanted to, and that too much of their lives would be disrupted if they decided to leave their organization. This result also implies that they have too few options to consider leaving their

organization and that if they had not already put too much of themselves into their organization, they would have considered working elsewhere. Many health care workers who were not even directly attending to COVID-19 patients were threatened with furloughs or reduced hours of work, especially in the early stages of the pandemic, as a result of the substantial economic burden and strain that the pandemic has placed on the global healthcare workforce. As compared to non-hospital health care workers, approximately 15% of hospital employees reported being unable to work for the past four weeks due to employer closures or business losses caused by the pandemic in May 2020 (Assistant Secretary for Planning and Evaluation, 2022). The employment obstacle potentially played a role in the retention of certain nurses amidst the ongoing economic difficulties precipitated by the pandemic. It is important to highlight and recognize this commitment among nurses, however, considering the fact that turnover intentions have increased significantly during COVID-19 across the globe (Falatah, 2021; Khattak et al., 2020; Irshad et al., 2021; Nashwan et al., 2021).

Nevertheless, the level of organizational commitment displayed in the current study appears to be better than the commitment among nurses in other studies. For instance, Faramawy and Kader (2021) presented in their study on COVID-19 anxiety and organizational commitment among front-line nurses based in three selected medical intensive care units in one of the Cairo University Teaching Hospitals in Egypt that there was a moderate level of commitment within staff nurses. Moreover, the results of the present study also were in concurrence with the findings of other studies on organizational commitment. Faramawy and Kader (2021) added that continuous commitment was the highest whilst affective commitment was the lowest among nurses. These findings were similar to the results of the study of Agarwala et al. (2014) and Al-Haroon and Al-Qahtani (2020) which both denoted that nurses demonstrated more agreement with the continuous commitment subscale than the normative and affective commitment subscale.

Furthermore, the present study also found that the surveyed nurses had very high levels of psychological capital. Moreover, hope had the highest composite score among the factors of psychological capital. In the context of psychological capital measurement, this result implies that the nurses were energetically pursuing their work goals and have found several ways in doing so, were concentrated in achieving such goals, and they continue to find ways to improve and do better despite the ongoing pandemic. Several studies highlighted the importance of hope at work when faced with difficult situations. As underscored in the study of Yildirim et al. (2020), hope is a critical strength required in nurses. A nurse who has higher levels of hope will be better equipped to cope with workplace challenges, suggest alternative solutions, and reduce the likelihood of despair. The results of the present study also concur with the findings of Metwaly et al. (2018) which revealed that the common subscales of psychological capital with the highest composite scores are usually resilience and hope, followed by self-efficacy. Several pre-pandemic literatures also pointed out this fact, stating that, among the subscales of psychological capital, hope, along with resilience, optimism, and self-efficacy were the highest attributors to psychological capital (Liu et al., 2012; Zhou et al., 2017).

Overall, this very high level of psychological capital among nurses in Davao City should be recognized as it is comparably better when compared to their counterparts in Asia. Wang et al. (2021), for instance, identified Asian nurses as having the lowest psychological capital score. This may be attributable to the fact that nurses in Asia encounter more professional challenges. As an illustration, a considerable body of research originating from Asia examines the adverse work environments encountered by nurses and reveals elevated levels of exhaustion, workplace violence, and compassion fatigue (Xie et al., 2021; Yao

et al., 2021). This is a matter of concern due to the unprecedented strain that the COVID-19 pandemic has placed on healthcare professionals, specifically nurses, resulting in elevated levels of work-related stress (Arnetz et al., 2020; Leo et al., 2021). In light of this, it is crucial to implement strategies that promote psychological capital among nurses in order to alleviate stress. This was supported by Ali et al. (2021), who demonstrated in their research that individuals with high psychological capital are able to recover and progress despite encountering challenges at work. Enhanced psychological capital positively correlates with improved performance among nurses. Similarly, elevated levels of psychological capital may indicate favorable work-related performance on the part of an employee.

The correlation and regression analyses done in this study revealed that COVID-19 stress was positively correlated with and is a predictor of organizational commitment. These results imply that an increase in stress at the time of the pandemic is correlated to and causes an increase in the level of commitment that they have towards their organization. These results differ from various studies that examined the relationship of stress on organizational commitment among healthcare professionals. Haji et al. (2021), for instance, found in their study involving nurses working in Iran during the pandemic that job stress is negatively related to organizational commitment. The same negative correlation has been found for nurses working in Jordan (Saadeh & Suifan, 2020). Several pre-pandemic studies also pointed out the same relationship, highlighting that job stress has a significant inverse relationship with organizational commitment (Ali & Kakakhel, 2013; Gargr & Dhar, 2014; Haque & Aston, 2016). There is a strong effect from employees' physical and psychological well-being on organizational commitment (Eisenberger et al., 2010; Meyer & Maltin, 2010), and when individuals feel that they have less control over these stresses (Gargr & Dhar, 2014), it lowers their performance and productivity, causing a negative impact on employees' attitude and behaviors, leading to reduced organizational commitment (Gargr & Dhar, 2014; Haque & Aston, 2016).

On the other hand, there were a few studies which supported that stress is correlated with organizational commitment. Wang et al. (2020), for instance, in their study on the association between job stress and organizational commitment in three types of Chinese University Teachers, found that the higher the job stress perceived, the stronger the organizational commitment would be. It was therefore suggested in their study that it is good for university teachers to maintain a moderate work pressure. In addition, the meta-analysis conducted by Ateş and İhtiyaroğlu (2018) which examined the correlation between stress and organizational commitment revealed that in the field of health, the influence of stress on organizational commitment is both positive and weak. While the fact that this impact is positive in the field of health can be explained by the second phase of general adaptation syndrome, Wang et al. (2020) noted that its being weak is quite interesting. The possibility that sample is selected from healthcare professionals who have lower exposure levels to stress in many studies may explain the weak relationship between stress and organizational commitment in the field of health. However, the fact that healthcare professionals have high insensitivity to stress as stress is intense in the field of health may also be the cause of this weak relationship. As a result of this insensitivity, healthcare professionals are not affected by causes of stress and the impact of stress on their organizational commitment may remain weak. These variation in what existing studies state about the relationship between stress and organizational commitment points to the fact that their correlation is multifaceted and should be studied extensively based on individual contexts.

Furthermore, the correlation and regression analyses conducted in this study demonstrated that COVID-19 stress is positively connected with and has a substantial influence on the psychological capital of

nurses in Davao City. These findings suggest that an increase in COVID-19 stress correlates with and causes a rise in the nurses' psychological resources during the pandemic. The findings are congruent with Turliuc and Candel's (2021) research, which found that higher levels of psychological capital among healthcare workers were observed during the early days of the COVID-19 crisis. Li et al. (2014) further, noting that persons with higher psychological resources, or psychological capital, are better prepared to deal with major crises. They also receive more social support, resulting in a helpful social network that allows them to remain content with their lives even under difficult circumstances. Rabenu et al. (2016) expanded on this, claiming that psychological capital can guard against shocks independent of their source. Psychological capital enables people to employ stronger coping mechanisms in a variety of stressful situations. Psychological capital may motivate people to cope via change and acceptance rather than withdrawal. Being more adaptable, positive about the future, and confident in one's talents may offer people with the resources they need to endure stressful situations.

Moreover, the present study also revealed that psychological capital is positively correlated to and significantly influences organizational commitment among nurses. This finding coincides with the results of studies done on this subject. For instance, Nguyen and Ngo (2020) discovered in their research that psychological capital is positively correlated with employees' organizational commitment in a statistically significant manner. It implies that an employee's level of organizational commitment increases with his psychological capital level. Positive psychological capital can boost nurses' organizational commitment in the COVID-19 pandemic context by strengthening their understanding of the organization's goals and values, fostering a stronger sense of identification and belonging, and increasing their willingness to work for and remain with the organization. As a result, there is a greater willingness to take on new responsibilities, a more active emphasis on work, and high levels of organizational citizenship behavior (Firmansyah et al., 2022; Tang et al., 2019; Zhou et al., 2018). In fact, research has shown that psychological capital is a motivating factor that positively affects a variety of organizational outcomes, including organizational commitment (Luthans & Youssef-Morgan, 2017). Psychological capital is an important personal resource that can increase a person's motivation for their work and strengthen their sense of commitment to an organization. The development of organizational citizenship behavior is subsequently influenced by these factors (Bogler et al., 2019, Cho & Kao, 2022, Tang et al., 2019).

These benefits of psychological capital come in handy as results from the mediation analysis done in the present study revealed that psychological capital significantly mediates the relationship between COVID-19 stress and organizational commitment among nurses working in Davao City. This finding reveals a more complex and nuanced relationship between COVID-19 stress and organizational commitment rather than a straightforward direct relationship. It suggests that whereas COVID-19 stress directly affects organizational commitment, this link is also influenced by underlying processes involving psychological capital. This research implies that the way COVID-19 stress affects organizational commitment is through psychological capital. This indicates that changes in psychological capital either strengthen or weaken the impact of COVID-19 stress on organizational commitment. Put differently, nurses' psychological capital may influence the direction or degree of the relationship between COVID-19 stress and organizational commitment. While lower levels may worsen these effects, higher levels of psychological capital may act as a buffer against the effects of COVID-19 stress on organizational commitment.

While there is a dearth of available studies that investigated the mediating effect of psychological capital on the relationship between COVID-19 stress and organizational commitment among nurses to date, several studies exist that highlight the importance of psychological capital and its capacity to mediate factors that affect the workplace conditions of nurses. For one, Shah et al. (2019) presented strong evidence that psychological capital acts as a mediator in the connection between psychological empowerment and positive employee attitudes and behaviors, ultimately resulting in increased organizational commitment. Furthermore, Zhou et al. (2018) did an empirical study in the healthcare sector which showed that nurses who experienced high levels of stress due to extended working hours had a positive correlation between their psychological capital and organizational commitment. Di Maggio et al. (2021) argue that studying the psychological capital of healthcare professionals is crucial, considering that it helps these professionals deal with stress factors caused by factors related to work, as well as certain behavioral and healthcare problems of patients – a phenomenon which is also seen during the COVID-19 outbreak (Asmundson & Taylor, 2020a, 2020b; De Pedro et al., 2021; Hu et al., 2020; Lai et al., 2020; Li et al., 2020; Wang et al., 2020; Zaghini et al., 2020).

The recognition of psychological capital as a mediator underscores its potential to serve as a target for interventions designed to enhance organizational commitment within the framework of stress caused by COVID-19. Implementing strategies that prioritize the development of psychological capital, including but not limited to resilience training, stress management programs, and the cultivation of a supportive work environment, could potentially mitigate the adverse effects of COVID-19 stress on nurses' organizational commitment. Furthermore, a comprehension of the partial mediation implies that interventions that specifically target psychological capital might yield enduring impacts on organizational commitment, surpassing the mere resolution of immediate stressors associated with COVID-19. Organizations may foster enhanced resilience and dedication among nurses by fortifying psychological capital; this may yield favorable consequences for employee retention, job satisfaction, and long-term organizational success (Bogler et al., 2019; Cho & Kao, 2022; Dawkins et al., 2013; Firmansyah et al., 2022; Luthans & Youssef-Morgan, 2017; Nguyen & Ngo, 2020; Tang et al., 2019; Sahoo & Sia, 2015; Zhou et al., 2018).

Limitations of the Study

The present study exhibits some limitations, hence necessitating the need for additional investigation. The data collection method employed in a cross-sectional way has limitations in capturing longitudinal changes in the levels of COVID-19 stress, psychological capital, and organizational commitment among nurses in Davao City and the mediating effect of psychological capital on the relationship between COVID-19 stress and the organizational commitment over time. Additionally, the present study was carried out through an online survey, which exhibited certain limitations in terms of response rate and sample size. These factors limit the extent to which the findings may be considered representative and generalizable. It is advisable to use caution while utilizing the research findings. However, the findings of this study might serve as valuable information for developing initiatives or programs that support the psychological capital of nurses in the event of a future pandemic.

5. CONCLUSION

The present study revealed that the nurses working in Davao City had high levels of COVID-19 stress, very high levels of psychological capital, and high levels of organizational commitment despite the dire circumstances that is the COVID-19 pandemic. Nevertheless, the correlational and mediation analyses

done in the present study underscored the intricate and multifaceted nature of the correlation between COVID-19 stress, psychological capital, and organizational commitment among nurses. Although there is a prevailing belief that heightened levels of stress will inevitably result in reduced organizational commitment, the results of the current research indicate that this correlation may not always be linear. The unexpected findings highlight the complexity of the relationship between stress, COVID-19 psychological capital, and organizational commitment. Rather than assuming a linear or negative association, the present study underscores the need to consider the nuanced interplay among these variables and the contextual factors that may influence their dynamics. The manner in which individual nurses react to COVID-19-related stress may vary according to a number of factors, including their psychological capital which includes resources such as work self-efficacy, optimism, hope, and resilience. The positive correlation observed also suggests that under certain circumstances, such as those posed by the COVID-19 pandemic, stress may serve as a catalyst for the development of psychological resources and increased commitment to the organization.

Furthermore, the significance of nurses' psychological resources in influencing their attitudes and behaviors toward their organization is underscored by the mediating effect of psychological capital in the relationship between COVID-19 stress and organizational commitment. Nurses with higher levels of psychological capital may be better equipped to cope with stressors and maintain their commitment to their organization, even in challenging circumstances. These results emphasize the need for research that is specific to the context to comprehend the distinct dynamics and determinants that impact the attitudes and actions of nurses as they cope with the stress caused by COVID-19. Broad generalizations regarding the impact of stress on organizational commitment might overlook the nuances of the nursing profession and the varied experiences that nurses encounter across settings.

In summary, the disagreement between the results obtained from the current investigation and the prevailing belief concerning the influence of COVID-19 stress on organizational commitment highlights the complexity of this relationship and demands further research into the underlying mechanisms and contextual factors that shape the attitudes and conduct of nurses when confronted with stressors such as the COVID-19 pandemic.

6. IMPLICATIONS

The results have significant implications for nursing practice, especially in the context of the ongoing COVID-19 pandemic. Nursing leaders and administrators should acknowledge the potential beneficial impacts of stress and establish measures to assist nurses in utilizing stress as a catalyst for personal and professional development. This may entail offering resources to enhance resilience, cultivating a work climate that is supportive, and facilitating opportunities for skill enhancement and career progression.

Moreover, healthcare organizations should prioritize the psychological capital of nurses, particularly during periods of increased stress such as the COVID-19 pandemic. Healthcare organizations should also recognize the diversity of nurses' responses to COVID-19 stress and develop tailored support interventions that address individual needs and preferences. Instead of making the assumption that stress universally has a negative impact on organizational commitment, it is advisable for organizations to offer resources and support systems that enable nurses to effectively handle pressures and uphold their commitment to the organization. This may involve facilitating access to mental health resources, delivering counseling services, and advocating for self-care behaviors to assist nurses in cultivating and sustaining their psychological well-being.

On this note, resilience training programs can also be incorporated into nursing education and professional development activities to provide nurses with the necessary skills and methods to effectively manage and overcome stressors. Organizations can alleviate the effects of COVID-19 stress on nurses' mental well-being and dedication by strengthening their resilience. Additionally, nursing leaders should recognize and respect the individual differences in nurses' responses to stress and organizational commitment. This necessitates an individualized approach to provide support and supervision that considers the unique strengths, coping mechanisms, and career goals of nurses. Organizations can strengthen organizational commitment by recognizing and appreciating the different experiences and viewpoints of nurses, so fostering a culture of inclusivity and empowerment is also recommended.

Moreover, nursing practice should also encompass continuous monitoring and adaptation of support strategies based on ongoing assessment of nurses' needs and feedback. Due to the ever-changing healthcare landscape and the ongoing problems presented by the COVID-19 epidemic, it is crucial for organizations to be adaptable and proactive in their efforts to promote the well-being of nurses and their commitment to the organization. This may entail conducting regular assessments, administering employee surveys, organizing focus groups, and facilitating open discussions to acquire valuable perspectives and pinpoint opportunities for enhancement, especially as regards to determining how to maximize stress and psychological capital in enhancing the overall workplace wellbeing of nurses, ultimately leading to enhanced organizational commitment.

Finally, the unforeseen findings of the current study emphasize the necessity for additional research to investigate the complex dynamics of the connection between COVID-19 stress, psychological capital, and organizational commitment. Longitudinal research, qualitative inquiries, and experimental designs have the potential to offer more profound understanding of the intricate dynamics involved and assist in confirming and expanding upon the early findings of the present study.

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