



Short Paper

The Safeguarding Influence of Resilience on COVID-19 Impact on the Quality of Life among Nursing Students in Pampanga, Philippines

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Abstract

As previously reported in different studies, resilience has a safeguarding effect on the mental state of individuals, and the onset of the COVID-19 pandemic had a great impact on all aspects of the life of every citizen in different sectors. Thus, the current study was



conducted to determine the protective role of resilience on the impact of COVID-19 on the quality of life among nursing students. A descriptive correlational design was applied and results were analyzed through IBM SPSS version 23. Using purposive sampling, 334 students enrolled in the Bachelor of Science in Nursing in a private academic institution in Pampanga voluntarily participated via an electronic-based survey. Two adopted questionnaires: the Brief Resilience Scale (BRS) and Covid-19 Impact on Quality of Life (COV19-QoL) were utilized. Nursing students demonstrated moderate resiliency ($M=3.0205$; $SD=0.18669$), and the COVID-19 pandemic had a moderate impact on nursing students' QoL ($M=3.0165$; $SD=0.20463$). Data analysis further revealed a correlation coefficient of $r=-0.430$, and a p-value of 0.000, which indicated that there is a significant and moderate negative correlation between the level of resilience and the level of COVID-19 impact on the quality of life. Therefore, the higher the resiliency level, the lower the impact of COVID-19 on the quality of life among nursing students. Findings suggest that since the COVID-19 pandemic had an impact on nursing students, a focal point of action for institutions with nursing programs is to consider understanding the factors and develop strategies that further strengthen the innate resiliency of nursing students.

Keywords – resilience, quality of life, COVID-19 pandemic, nursing students, Pampanga

INTRODUCTION

In unprecedented and massive ways, the virulent transmission of Coronavirus Disease 2019 (COVID-19) is affecting humanity and the world leading to the upsurge of new issues and debates. World Health Organization, (2022) reported 486,761,597 COVID-19 confirmed cases globally, including 6,142,735 deaths, as of April 2022. In the Philippines, the Department of Health, (2022) recorded 3,678,598 individuals infected with COVID-19 and 59,298 deaths as of April 2022. The pandemic required the country to implement standard precautionary measures and coping with all of these, necessitate physical health and mental resilience. Selman et al. (2020) mentioned that based on the evidence left by the prior health pandemics, generally, this large-scale event has a tremendous impact not just only on physical health but also on mental health and the Quality of Life (QoL). The challenges and hardships brought by the widespread virus can be a threat to the resilience of Filipinos (Callueng et al., 2020). Aslan and Pekince, (2020) highlighted the emerging concern of the unexpected interruption of education for nursing students. The temporary discontinuation of face-to-face learning, including hospital and community exposures, brings the issue of inadequacy in clinical skill development and application, and the uncertainty of when, where, and how to do the compensatory training to solve insufficiency could stress nursing students. Moreover, during the pandemic and in the new normal era, mental health problems have become critical issues (Gunawan et al., 2020).

Concurrently, before the pandemic, some studies have revealed that resilience has a protective role on mental health problems, depression, and stress among nursing students (Mcdermott et al., 2020; Sam & Lee, 2020). However, according to Guillasper et al., (2021) in the context of the COVID-19 pandemic, the role of resilience on the impact on the QoL among nursing students has not been yet extensively explored or investigated. Furthermore, many accessible studies that looked into the mental health of students during the pandemic were conducted among the students in higher education and the general population (Aristovnik et al., 2020; Tee et al., 2020), even so, research is scarce specifically among nursing students in the Philippines (Guillasper et al. 2021). Available research studies involving nursing students, on the other hand, focused on fear (Oducado, et al., 2021) and levels of stress (Alateeq et al., 2020; Aslan & Pekince, 2020) not mainly on the COVID-19 impact on QoL relating to mental health (Guillasper et al., 2021).

Thus, the study was conducted to determine the influence of resilience on the impact of COVID-19 on the QoL among nursing students. What is more, previous studies have exhibited that stress, fear, and other negative emotional responses related to the COVID-19 pandemic differed according to personal characteristics (Alateeq et al., 2020; Aristovnik et al., 2020; Aslan & Pekince, 2020), it may also be essential to examine whether COVID-19 impact among nursing students significantly vary in terms of demographic characteristics, the presence of COVID-19 confirmed case near the residence, and the existence of any medical condition that might increase the risk of acquiring severe illness from COVID-19 concerning resiliency (Guillasper et al. 2021). The gathered and analyzed data will establish baseline information and support the university in the effective planning, decision-making, and intervention that build the resilience of nursing students.

LITERATURE REVIEW

Polk's resilience hypothesis (1997)

Polk's resilience hypothesis (1997) asserts that a person has the power to overcome adversity. There are a lot of aspects that play into this ability to be resilient, including (a) dispositional, (b) relational, (c) situational, and (d) philosophical factors (Jackson, 2015). Laura Polk devised the notion of resilience, which was initially published in the journal *Advances in Nursing Science* (Kenyon, 2020). Polk (1997) discussed the principles of resilience and identifies patterns and clusters to develop the theory. Feelings of value, confidence, self-esteem, and autonomy are all part of the dispositional pattern. While the intrinsic and extrinsic elements play a role in the relationship pattern. Having a confidant, choosing positive role models, and seeking help are all intrinsic components of role and relationship qualities. Further, extrinsic factors include behaving successfully in social situations, being a part of a supportive group, being engaged in school or work, and having hobbies. The ability to be adaptable, resourceful, inquisitive, and persistent is a situational pattern. Hopes for better times, finding the positive side of things,

introspection, contributing to a greater good, and feeling that all beings are unique and worthwhile are all philosophical patterns.

Polk (1997) combined the simultaneity paradigm of the environment and human energy flow with the four-dimensional patterns of resilience (dispositional, relational, situational, and philosophical) that she had created earlier to create her theory of resilience. When a stressor is added into this dynamic system, the individual and environment suffer disorder, or chaos, while changing in an attempt to achieve a higher level of equilibrium, or negentropy. The open interchange of energy fields of the environment-individual dynamic and the four patterns of resilience filter this stressor. These four patterns interact and integrate synergistically, shifting the environment from chaos to negentropy and higher-order. Resilience is the name given to the entire process.

Protective role of resilience on COVID-19

Resilience is understood as a trajectory of recovery. It is related to maintaining mental health or the full recovery of pre-adversity functioning (Layne et al., 2009). Further, in the study conducted by Chow et al. (2018) highlighted resilience as the ability to overcome such adversity and learn to be stronger from the challenging events. Also, it is found to have an impact on learning experience, academic performance, course completion, and, in the longer term, professional practice. Viewing this, the pandemic had an impact on every industry, including nursing education. And as the crisis worsened, many governments shut down schools, colleges, and institutions to protect students, teachers, and their countries. With the onset of the pandemic, face-to-face classes, clinical skills laboratories, and student clinical placement were either suspended or restricted around the world, particularly in countries that were severely affected by the outbreak, to maintain and safeguard the health of students and faculty as a whole, affecting people's lives (British Columbia College of Nursing Professionals, 2020; College & Association of Registered Nurses of Albe, 2020).

During a pandemic, resilience is critical for successfully adapting and recovering from stressful situations such as lockdown measures and other restrictions. This is different for different populations, settings, and civilizations (McDonald et al., 2012). In addition, resilience and positive coping strategies can resist stress and improve personal well-being (Chow et al., 2018). That is why according to Barzilay et al. (2020) measuring resilience is important during a pandemic because the results can be utilized in better planning for the allocation of available resources as well as strategizing appropriate interventions for individuals and communities. In essence, resilience theory contributes to a more constructive approach to stress management. Strengthening resilience and reinforcing better coping skills may thus aid an individual in coping with the pandemic's unavoidable changes.

Quality of life of nursing students

The World Health Organization (WHO) defines the quality of life as "an individual's view of their place in life, concerning their objectives, aspirations, standards, and worries, in the context of the culture in which they live." While Felce and Perry 1995 brought out the existence of a considerable agreement that quality of life is multidimensional. Coverage may be categorized within five dimensions: physical well-being, material well-being, social well-being, emotional well-being, and development and activity.

With the anxiety brought on by COVID-19, the pandemic produced significant interruptions in promoting quality of life (Beisland et al., 2021). Since knowledge about the COVID-19 virus is now progressing, thus research regarding the impact of the pandemic on quality of life is increasing (Rabacal, Oducado & Tamdang, 2020). In managing challenges and difficulties in life during the pandemic, according to Kim et al. (2021), various coping mechanisms are considered to be effective just like having parental and spiritual support. The presence of parental support was associated with lower anxiety among college students during the COVID-19 outbreak, further, students with high spiritual support had greater personal happiness and satisfaction with life, as well as better adjustment to college life. Thus developing resilience in nursing students can help them enhance their quality of life, achieve academic achievement, and prepare for the demanding role that comes with the profession (Keener et al., 2021). Everything in life must be in a state of equilibrium. Whatever you oppose persists, therefore learning to let go and adapt to change and adversity may be quite beneficial in developing a new mindset and increasing resilience.

METHODOLOGY

A descriptive correlational design was utilized. The main purpose of this method is to provide an accurate description or picture of the status or characteristics of a situation or phenomenon. The focus is to describe the variables that exist in a given situation and, sometimes, on describing the relationships that exist among those variables (Johnson & Christensen, 2017). The study aimed to examine the relationship between resilience the COVID-19 impact on the quality of life among nursing students from all levels and will determine whether COVID-19 impact among nursing students significantly differs in terms of demographic characteristics, the existence of a local case of COVID-19 near their residence, and the presence of any medical condition that might increase their risk for severe illness from COVID-19. Test for differences and correlational analyses were performed.

The study conducted a purposive sampling design. The researchers considered studying three hundred thirty-four (334) students who are currently enrolled in the Bachelor of Science in Nursing and studies in a private academic institution in Pampanga due to the nature of the research design and aims and objectives. Nursing students voluntarily participated in an electronic-based survey for ten (10) days from 14 -23 March 2022. All nursing students were present and volunteered to participate in the study.

Two (2) questionnaires were adopted for this study, the Brief Resilience Scale (BRS) and COVID-19 Impact on Quality of Life (COV19-QoL). Permission to utilize the instruments was approved by the developers. The BRS by Smith et al. (2008) was employed to measure nursing students' resiliency or ability to recover or bounce back from stress. Participants answered on a five-point Likert scale (1 – “strongly disagree” to 5 – “strongly agree”). The BRS had a reported Cronbach's $\alpha = .80-.91$ (Smith et al., 2008). While the COV19-QoL by Repišti et al. (2020) was used to assess the impact of the pandemic on the QoL of nursing students. Participants responded on a five-point Likert scale (1 – “totally disagree” to 5 – “completely agree”). Rabacal et al. (2020) mentioned the COV19-QoL had a reported Cronbach's $\alpha = .90$ among Filipino samples. The electronic-based survey was administered in the English language. Demographic information (e.g., gender, year level, estimated monthly family income) was also collected. The respondents were further asked about the existence of a local case of COVID-19 near their residence and if they have any medical condition that might increase their risk for severe illness from COVID-19.

All protocol-required procedures were strictly followed. Full disclosure about the study was given at the start of the survey. Students were reminded that they have the freedom to participate voluntarily in the study, which will not affect their grades. The identity of the respondents is kept anonymous unless legally called for revelation. Collected data were sent to the statistician for analysis and only the researchers, statistician, panel have access to the gathered data. A clustered and analyzed version of the data are shown in the manuscript. All gathered information is highly confidential and will be kept for at least 2 years stored in the group leader's Google Drive. The researchers anticipated that there is no risk among the participants being harmed since it will be conducted online. Finally, stringent adherence not just to ethical norms, but also to the Data Privacy Act of 2012, was fully enforced.

Statistical data analysis was utilized via the IBM SPSS version 23. The profiles of the respondents were described in terms of frequency (f) and percent (%) distributions. Descriptive statistics for continuous variables were expressed as mean (M), and standard deviation (SD), and the following arbitrary scale was used to interpret the means: 1.00-1.79 -Very Low Resilience, .80-2.59 -Low Resilience, 2.60-3.39 -Moderate Resilience, 3.40 -4.19 -High Resilience, 4.20-5.00 -Very High Resilience. To determine significant differences in the resiliency levels amidst the pandemic, a T-test for independent samples with analysis of variance was used, and to know specific pairs which are significantly different, ANOVA with Tukey HSD was applied. While Pearson's product-moment correlation coefficient was applied to correlate the level of resilience and COVID-19 impact on the quality of life. A sig. (or p-value) that is less than 0.05 (level of significance), then will be considered a significant difference between and among the groups.

RESULTS

A total of 334 students enrolled in the Bachelor of Science in Nursing in Pampanga voluntarily participated in the conducted electronic-based survey, which is 100% of the

target respondents. Table 1 shows the number and percentage of the following variables: (a.) 238 females which are equivalent to 71.3 % of the total respondents and 96 males (28.7%), and (b.) year level which reflects 38.0% or most of the respondents came from first-year level, (c.) it can be seen that 55.1 % of the nursing students have an estimated monthly family income of 20,000php and above, (d.) 64.4 % of the respondents answered no presence of COVID-19 case near their residence and (e.) 85.3 % of the nursing students have no presence of a medical condition.

Table 1. Demographics and descriptive data of independent variables

| Variables | Frequency | Percent |
|---|-----------|---------|
| Gender | | |
| Female | 238 | 71.3 |
| Male | 96 | 28.7 |
| Year Level | | |
| First Year | 127 | 38.0 |
| Second Year | 98 | 29.3 |
| Third Year | 58 | 17.4 |
| Fourth Year | 51 | 15.3 |
| Estimated monthly family income | | |
| 10,000php to 19,999php | 102 | 30.5 |
| 20,000php and above | 184 | 55.1 |
| below 10,000php | 48 | 14.4 |
| Presence of COVID-19 case near their residence | | |
| No | 215 | 64.4 |
| Unsure | 86 | 25.7 |
| Yes | 33 | 9.9 |
| Presence of a medical condition | | |
| No | 285 | 85.3 |
| Yes | 49 | 14.7 |

Table 2. Levels of the resiliency of the nursing students

| Resilience Indicators | N | M | Interpretation | SD |
|---|-----|--------|---------------------|--------|
| I tend to bounce back quickly after hard times. | 334 | 3.3204 | Moderate Resilience | .81782 |
| I have a hard time making it through stressful events. | 334 | 2.7874 | Moderate Resilience | .92983 |
| It does not take me long to recover from a stressful event. | 334 | 3.1138 | Moderate Resilience | .87624 |

| | | | | |
|---|----------|---------------|----------------------------|---------------|
| It is hard for me to snap back when something bad happens. | 334 | 2.8922 | Moderate Resilience | .97124 |
| I usually come through difficult times with little trouble. | 334 | 3.0509 | Moderate Resilience | .83132 |
| I tend to take a long time to get over setbacks in my life. | 334 | 2.9581 | Moderate Resilience | .92255 |
| OVERALL MEAN | 6 | 3.0205 | Moderate Resilience | .18669 |

It can be confirmed in Table 2 that nursing students have moderate resiliency in all the given indicators with a total mean score of 3.0205.

Table 3. COVID-19 impact on the quality of life of nursing students

| Impact of COVID-19 on the QoL Indicators | N | M | Interpretation | SD |
|--|----------|---------------|------------------------|---------------|
| I feel that my safety is at risk. | 334 | 2.6437 | Moderate Impact | 1.00240 |
| I feel tenser than before. | 334 | 3.0928 | Moderate Impact | 1.04856 |
| I think my quality of life is lower than before. | 334 | 2.9371 | Moderate Impact | 1.05078 |
| I think my mental health has deteriorated. | 334 | 3.2156 | Moderate Impact | 1.13434 |
| I think my physical health may deteriorate. | 334 | 3.1437 | Moderate Impact | 1.06979 |
| I feel more depressed than before. | 334 | 3.0659 | Moderate Impact | 1.13443 |
| OVERALL IMPACT | 6 | 3.0165 | Moderate Impact | .20463 |

Table 3 reflects the moderate impact of COVID-19 on the quality of life of the nursing students in all indicators with a total mean score of 3.0165.

Table 4. Differences in resiliency level according to gender

| | Gender | N | Mean | Std. Deviation | Std. Error Mean |
|----------------------|--------|-----|--------|----------------|-----------------|
| Levels of Resiliency | Female | 238 | 2.9980 | .51943 | .03367 |
| | Male | 96 | 3.0760 | .50016 | .05105 |

Table 5. Test of Independence: Differences in resiliency level according to gender

| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference |
|----------------------|-----------------------------|------|------|--------|---------|-----------------|-----------------|-----------------------|
| Levels of Resiliency | Equal variances assumed | .586 | .444 | -1.256 | 332 | .210 | -.07806 | .06214 |
| | Equal variances not assumed | | | -1.276 | 181.841 | .203 | -.07806 | .06115 |

Tables 4 and 5 present there is no significant difference in the levels of resiliency between two (2) genders, female and male respondents with a 0.210 two-tailed p-value is equal variances assumed.

Table 6. Differences in resiliency level according to year Level

| Levels of Resiliency | | | | | |
|----------------------|----------------|-----|-------------|-------|------|
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 3.877 | 3 | 1.292 | 5.063 | .002 |
| Within Groups | 84.249 | 331 | .255 | | |
| Total | 88.126 | 334 | | | |

Table 7. Multiple comparisons: Differences in resiliency level according to year level

| (I) YEARGROUPS | (J) YEARGROUPS | Mean Difference (I-J) | Std. Error | Sig. |
|----------------|----------------|-----------------------|------------|------|
| First Year | Second Year | .14310 | .06794 | .153 |
| | Third Year | .02900 | .08007 | .984 |
| | Fourth Year | -.19417 | .08376 | .096 |
| Second Year | First Year | -.14310 | .06794 | .153 |
| | Third Year | -.11410 | .08371 | .523 |
| | Fourth Year | -.33727* | .08724 | .001 |
| Third Year | First Year | -.02900 | .08007 | .984 |
| | Second Year | .11410 | .08371 | .523 |
| | Fourth Year | -.22317 | .09699 | .100 |
| Fourth Year | First Year | .19417 | .08376 | .096 |

| | | | | |
|--|-------------|---------|--------|------|
| | Second Year | .33727* | .08724 | .001 |
| | Third Year | .22317 | .09699 | .100 |

Table 6 shows there is a significant difference in the levels of resiliency between groups per year level with a p-value of .002, while it can also be seen in Table 7 the significant difference in the levels of resiliency specifically with year levels 2 and 4 with a p-value of .001.

Table 8. Differences in resiliency level according to estimated monthly family income

| Levels of Resiliency | | | | | |
|----------------------|----------------|-----|-------------|-------|------|
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 1.464 | 3 | .732 | 2.795 | .063 |
| Within Groups | 86.662 | 331 | .262 | | |
| Total | 88.126 | 334 | | | |

Table 8 displays there is no significant difference in the levels of resiliency between groups with varying estimated monthly family income with a p-value of 0.063.

Table 9. Differences in resiliency level according to the presence of COVID-19 confirmed cases near their residence

| Levels of Resiliency | | | | | |
|----------------------|----------------|-----|-------------|-------|------|
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 2.269 | 3 | 1.134 | 4.373 | .013 |
| Within Groups | 85.857 | 331 | .259 | | |
| Total | 88.126 | 334 | | | |

Table 10. Multiple Comparisons: Differences in resiliency level according to the presence of COVID-19 confirmed cases near their residence

| (I) YEARGROUPS | (J) YEAR GROUPS | Mean Difference (I-J) | Std. Error | Sig. |
|----------------|-----------------|-----------------------|------------|------|
| No | Unsure | .03807 | .09522 | .916 |
| | Yes | .21977 | .10429 | .090 |
| Unsure | No | -.03807 | .09522 | .916 |
| | Yes | .18170* | .06498 | .015 |
| Yes | No | -.21977 | .10429 | .090 |
| | Unsure | -.18170* | .06498 | .015 |

It can be observed in Table 9 the significant difference in the levels of resiliency between groups with, without, and unsure presence of COVID-19 confirmed cases near their residence with a p-value of .013, further, Table 10 reflects a significant difference in the levels of resiliency between groups with and unsure presence of COVID-19 confirmed case near their residence with the same p-value of .015.

Table 11. Differences in resiliency level according to the existence of any medical condition

| | Gender | N | Mean | Std. Deviation | Std. Error Mean |
|----------------------|--------|-----|--------|----------------|-----------------|
| Levels of Resiliency | No | 285 | 3.0287 | .50731 | .03005 |
| | Yes | 49 | 2.9722 | .55718 | .07960 |

Table 12. Test of Independence: Differences in resiliency level according to the existence of any medical condition

| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference |
|----------------------|-----------------------------|------|------|-------|--------|-----------------|-----------------|-----------------------|
| Levels of Resiliency | Equal variances assumed | .358 | .550 | -.709 | 332 | .479 | -.05646 | .07962 |
| | Equal variances not assumed | | | -.664 | 62.444 | .509 | -.05646 | .08508 |

Tables 11 and 12 illustrate no significant difference in the levels of resiliency between groups with and without the existence of any medical condition, reflected in the .479 two-tailed p-value is equal variances assumed.

Table 13. Relationship between resilience and COVID-19 impact on the quality of life of nursing students

| | Mean | Std. Deviation | N |
|----------------------|--------|----------------|-----|
| Mean Resilience | 3.0204 | .51443 | 334 |
| Mean Quality of Life | 3.0164 | .83977 | 334 |

Table 14. Correlations: Relationship between resilience and COVID-19 impact on the quality of life of nursing students

| | | Mean Resilience | Mean Quality of Life |
|----------------------|---------------------|-----------------|----------------------|
| Mean Resilience | Pearson Correlation | 1 | -.430** |
| | Sig. (2-tailed) | | .000 |
| | N | 334 | 334 |
| Mean Quality of Life | Pearson Correlation | -.430** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 334 | 334 |

** . Correlation is significant at the 0.01 level (2-tailed).

The result in Table 13 and Table 14 display a Correlation coefficient of $r = -.430$ and a p -value of 0.000, which indicates that there is a significant and moderate negative correlation between the level of resilience and the level of COVID-19 impact on the quality of life. It can then be construed that the higher the resiliency level, the lower the impact of Covid-19 on the quality of life of the nursing students.

DISCUSSION

The study covers a target of 334 nursing students in Pampanga. Monopolizing the target subject are females (71.3%) and males nursing students account for 28.7%. Percentage allocation for both genders does not have bearing on the results of the study as long as they are the target nursing students. Likewise, the year level of respondents with 67.3% are mostly 1st and 2nd-year level while 32.7% are in 3rd and 4th-year level will have no effect on the results of the study.

Students under study (85.6%) belong to a family that can make both ends meet and have other essentials in living because they are in the family income bracket of 10,000php to 20,000php and above per month. The fear instilled in minds of people is having infected by COVID-19 cases in their workplace, community, and residence but respondents may not have worried about the spread of infection because 64.4% said they have no cases near their residence, but it should not be taken for granted the 9.9% of students who said there are cases near their residence. If these cases no matter how few and not accorded immediate prevention and curative measures to nearby residents and relatives may result in a surge of cases. While 85.3 % of the students in this study are fortunate to have no medical conditions during the time of study since most of them have not suffered from COVID-19.

Nursing students under study apply moderate resiliency with a total mean score of 3.0205 because the result shows they tend to bounce back quickly after hard times, recover from a stressful event and they tend not snap back when something bad happens. This study indicates that resilience is negatively related to the impact of COVID 19 on the QoL of nursing students in Pampanga. The result indicates that the higher the resilience, the lesser the impact of COVID-19 on the QoL of nursing students. This finding is consistent with other studies suggesting that negative association between resilience with COVID-19 stress, fear, anxiety, and depression (Barzilay et al., 2020).

Moreover, it can be gleaned that COVID-19 impacted the QoL of nursing students to a moderate extent. Comparably, a moderate level of stress was observed among nursing students in Turkey during the COVID-19 pandemic (Aslan & Pekince, 2020), and students in the Philippines reported moderate to the severe psychological impact of the COVID-19 pandemic (Tee et al., 2020), and the mean composite score in the COV19-QoL scale was 3.02; in this result, it is a small degree higher compared to the QoL of people with non-

clinical samples in Croatia ($M = 2.91$) (Repišti et al., 2020) and Filipino teachers ($M = 2.75$) (Rabacal et al., 2020).

The finding of this study suggests that the COVID-19 pandemic has affected the lives of nursing students. This study also indicates that the impact of the COVID-19 on QoL was considerably higher among female nursing students. Consistent with the studies that females had higher stress levels than their male counterparts in a sample of nursing students in Turkey (Aslan & Pekince, 2020), students in Saudi Arabia (Alateeq et al., 2020), teachers and students in the Philippines (Oducado, Rabacal, et al., 2021; Tee et al., 2020). Even the result of a global survey in higher education also noted that females are more affected by the pandemic in their personal and emotional lives (Aristovnik et al., 2020).

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that the outbreak brought about by the COVID-19 virus has eventually affected the QoL of nursing students in Pampanga. Gender, estimated monthly family income, and the existence of any medical condition are not direct factors to consider for the level of resiliency of nursing students in Pampanga. While the significant difference in the levels of resiliency specifically with level 2 may suggest that challenges arise from online distance learning (ODL) also the increasing number of tasks and requirements in their level can make them feel stressed and exhausted, for the senior nursing students, they may feel similar stress from ODL since they might not enhance more student-centered learning and skills in the nursing process that the conventional classroom does, and pressure to pass not just the final semester but also the board exam. Additionally, students who are sure and unsure of existing COVID-19 confirmed cases near their residence bring fear and anxiety, all of these affect their ability to adapt to difficult situations, thus affecting their resiliency level. Moreover, the study concludes by emphasizing the protective role of resilience on the QoL in the context of the COVID-19 impact. Resiliency is a dynamic adaptive process, thus, students' ability to be resilient makes them less susceptible to any negative impact of the COVID-19 pandemic and decreases the possibility of opposing impact of the outbreak on the QoL among nursing students in Pampanga.

This is a call for concern not just on the aspect of physical health and safety but also on the student nurses' psychological health related to QoL. Failure to appropriately respond to stressful situations and other negative psychological problems, just like the COVID-19 epidemic, may result in detrimental consequences. This necessitates the development of preventive strategies to address the impact of COVID-19 on the QoL of nursing students. Nursing schools may need to craft interventions that further build and strengthen the resilience of nursing students. A capacity-building activity like a resilience-training program may be conducted to train students to respond to stressful events and other negative psychological and emotional distress, such as during the COVID-19 pandemic.

The research design cannot conclude the causal effect among the study variables; likewise, it cannot track temporal changes over time. Hence, our study only examined the correlation and not the causal effect between resilience and COVID-19 impact. Also, the use of online survey questionnaires lends itself to social desirability and self-reported bias. Nonetheless, the present study contributes to a better understanding of the protective role of resilience on the impact of the COVID-19 pandemic on the quality of life among nursing students. This research might be a starting point for further research.

IMPLICATIONS

Nursing institutions, health educators, and health leaders should have a focal point of action in developing interventions to further improve nursing students' ability to withstand adversity and bounce back from difficult life events. To the future researchers, the researchers of the present study express the need for more additional and extensive research to fully understand the other factors that might affect the resiliency and QoL of nursing students in the context of the COVID-19 pandemic and may further explore respondents in a conventional setup, considering the possibility of face-to-face classes shortly in compliance to COVID-19 standard protocols. With the identified limitations, this research contributes to a better understanding of the protective role of resilience on the impact of the COVID-19 pandemic on the quality of life among nursing students that can be used in crafting policies and addition to the existing literature and other references.

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REFERENCES

- AlAteeq, D. A., Aljhani, S., & AlEesa, D. (2020). Perceived stress among students in virtual classrooms during the COVID-19 outbreak in KSA. *Journal of Taibah University Medical Sciences*, 15(5), 398-403. <https://doi.org/10.1016/j.jtumed.2020.07.004>
- Aslan, H., & Pekince, H. (2020). Nursing students' views on the COVID-19 pandemic and their perceived stress levels. *Perspect Psychiatr Care*, 57(2), 695-701.
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, 12(20), 8438. <https://doi.org/10.3390/su12208438>
- Barzilay, R., Moore, T.M., & Greenberg, D.M., DiDomencio G.E., Brown, L.A., White, L.K., Gur, R.E. (2020). Resilience, COVID-19-related stress, anxiety, and depression during the pandemic in a large population enriched for healthcare providers. *Transl Psychiatry*, 10(291), 1-8. <https://doi.org/10.1038/s41398-020-00982-4>

- Beisland, E., Gjeilo, K., Andersen, J., Bratas, O., Haraldstad, K., Hjelmeland, I., Iversen, M., Loyland, B., Norekval, T., Riiser, K., Rohde, G., Urstad, K., & Utne, I. (2021). Quality of life and fear of COVID-19 in 2600 baccalaureate nursing students at five universities: a cross-sectional study. *Health and Quality of Life Outcomes*, 19 (198), 1-10.
- Callueng, C., Aruta, J. J. B. R., Antazo, B. G., & y Briones-Diato, A. (2020). Measurement and antecedents of national resilience in Filipino adults during coronavirus crisis. *Journal of Community Psychology*, 48(8), 2608-2624. <https://doi.org/10.1002/jcop.22438>
- Chmitorz, A., Kunzler, A., Helmreich I., Tüscher, O., Kalisch, R., Kubiak, T., Wessa, M., & Lieb, K. (2018). Intervention studies to foster resilience – A systematic review and proposal for a resilience framework in future intervention studies. *Clinical Psychology Review*, 59, 78-100. <https://doi.org/10.1016/j.cpr.2017.11.002>
- Deemah A., Al, A., Sumayah, A., Ibrahim, A., & Safaa M. (2020). Mental health among healthcare providers during coronavirus disease (COVID-19) outbreak in Saudi Arabia, *Journal of Infection and Public Health*, 13(10),1432-1437. <https://doi.org/10.1016/j.jiph.2020.08.013>.
- Department of Health, Philippines. (2022) Updates on Novel Coronavirus Disease (COVID-19). Retrieved from <https://doh.gov.ph/2019-nCoV>
- Felce D., & Perry J. (1995). Quality of life: Its definition and measurement. *Research in Development Disabilities*, Elsevier, 16(1), 51-74. [http://doi.org/10.1016/0891-4222\(94\)00028-8](http://doi.org/10.1016/0891-4222(94)00028-8)
- Guillasper, J. N., Oducado, R. M. F., & Soriano, G. P. (2021). Protective role of resilience on COVID-19 impact on the quality of life of nursing students in the Philippines. *Belitung Nursing Journal*, 7(1), 43–49. <https://doi.org/10.33546/bnj.1297>
- Gunawan, J., Aunguroch, Y., & Fisher, M. L. (2020). One year of the COVID-19 pandemic: Nursing research priorities for the new normal era. *Belitung Nursing Journal*, 6(6), 187-189. <https://doi.org/10.33546/bnj.1255>
- Helmreich I., Kunzler A., Chmitorz A., (2017). Psychological Interventions for Resilience Enhancement in Adults. *Cochrane Database Syst Rev*. <https://doi.org/10.1002/14651858.CD012527>
- Jackson, D., Bradbury-Jones, C., Baptiste, D., Gelling, L., Morin, K., Neville, S., & Smith, G. (2020) Life in the pandemic: Some reflections on nursing in the context of COVID-19. *Journal of Clinical Nursing*, 29, 2041– 2043 <https://doi.org/10.1111/jocn.15257>.
- Johnson B., & Christensen I. (2017) Educational Research, Quantitative, Qualitative and Mixed Approaches. 6th Edition. SAGE Publications, Inc.
- Jordan, J. (2005). Relational resilience in girls. *Handbook of Resilience in Children*, ISBN: 978-0-306-48571-8
- Keener, T., Hall, K., Kesheng, W., Hulsay, T., & Piamjariyakul, U. (2021). Quality of life, resilience, and related factors of nursing students during the covid 19 pandemic. *Nurse Educator*, 46(3), 143-148. [doi: 10.1097/NNE.0000000000000969](https://doi.org/10.1097/NNE.0000000000000969)
- Kenyon, K. (2020). Not Giving Up: Using Polk’s Theory of Resilience to Tackle Clinician Burnout. *Theoretical foundation in advance nursing practice*.

- Kim, S.C., Sloan, C., Montehano, A., & Quiban, C. (2021). Impacts of Coping Mechanisms on Nursing Students' Mental Health during COVID-19 Lockdown: A Cross-Sectional Survey. *Nurs. Rep*, 11, 36–44. <https://doi.org/10.3390/nursrep11010004>
- Layne, C.M., Beck, C.J., Rimmasch, H., Southwick, S.J., Moreno, M.A., & Hobfoll S.E. (2009). Promoting "resilient" posttraumatic adjustment in childhood and beyond. "Unpacking" life events, adjustment trajectories, resources, and interventions. D. Brom, R. Pat-Horenczyk, J.D. Ford (Eds.)
- McDermott, R. C., Fruh, S. M., Williams, S., Hauff, C., Graves, R. J., Melnyk, B. M., & Hall, H. R. (2020). Nursing students' resilience, depression, well-being, and academic distress: Testing a moderated mediation model. *Journal of Advanced Nursing*, 76(12), 3385-3397. <https://doi.org/10.1111/jan.14531>
- McDonald, G., Jackson, D., Wilkes, L., & Vickers, M. (2012). A work-based educational intervention to support the development of personal resilience in nurses and midwives. *Nurse Education Today*, 32, 378–384.
- Oducado, R.M., Rabacal, J., Moralista, R., & Tamdang, K. (2021), Perceived Stress Due to COVID-19 Pandemic Among Employed Professional Teachers. *International Journal of Educational Research and Innovation*, 15, 305-316, <https://doi.org/10.46661/ijeri.5284>
- Oducado, R. M. F., Tuppal, C., Estoque, H., Sadang, J., Superio, D., Real, D. V., & Fajardo, M. T. (2021). Internet use, eHealth literacy and fear of COVID-19 among nursing students in the Philippines. *International Journal of Educational Research and Innovation*. <http://dx.doi.org/10.2139/ssrn.3762848>
- Rabacal, J. S., Oducado, R. M. F., & Tamdang, K. A. (2020). COVID-19 impact on the quality of life of teachers: A cross-sectional study. *Asian Journal for Public Opinion Research*, 8(4), 478-492. <https://doi.org/10.15206/ajpor.2020.8.4.478>
- Repišti, S., Jovanović, N., Kuzman, M. R., Medved, S., Jerotić, S., Ribić, E., Majstorović, T., Simoska S.M., Novotni L., Milutinović, M., Stoilkovska B.B., (2020). How to measure the impact of the COVID-19 pandemic on quality of life: COVID-19- QoL—the development, reliability, and validity of a new scale. *Global Psychiatry*, 3(2), 1-10. <https://doi.org/10.2478/gp-2020-0016>
- Sagone, E., De Caroli, M. (2014). A correlational study on dispositional resilience, psychological well-being, and coping strategies in university student.
- Sam, P. R., & Lee, P. (2020). Do stress and resilience among undergraduate nursing students exist? *International Journal of Nursing Education*, 12(1), 146-149.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194-200. <https://doi.org/10.1080/10705500802222972>
- 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>
- Tuppal, C.P., Ninobla, M.M.G., Ruiz, M.G.D., Loresco, R.D., Tuppal, S.M.P., Panes, I.I., Oducado, R.M.F., Prudencio, D.A.M., Vega, P.D., Eribal, M.J.E., Real, D.V.P., & Roa, M.N.T. (2021). Knowledge, Attitude, and Practice toward COVID-19 among Healthy

Population in the Philippines. *Nurse Media Journal of Nursing*, 11(1), 61-70.
<https://doi.org/10.14710/nmjn.v11i1.36067>

World Health Organization. (2022). WHO Coronavirus (COVID-19) Dashboard. Retrieved from <https://covid19.who.int/>