



AMERICAN JOURNAL OF MULTIDISCIPLINARY RESEARCH AND INNOVATION (AJMRI)

ISSN: 2158-8155 (ONLINE), 2832-4854 (PRINT)

VOLUME 2 ISSUE 4 (2023)



PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA

COVID-19 Stressors on University Employees' Mental Health: Basis for the Development of an Enhancement Program

Cristy H. Cangrejo¹, Brian Gil S. Sarinas^{1*}, Virmari S. Tan¹

Article Information

Received: July 20, 2023

Accepted: August 09, 2023

Published: August 14, 2023

Keywords

*Descriptive, Employees,
Enhancement Program,
Mental Health, Stressor*

ABSTRACT

This study was conducted to determine the level of COVID-19 stressors on mental health among employees of John B. Lacson Foundation Maritime University (Arevalo), Inc. during the second semester of the school-year 2021-2022. A validated and reliability-tested questionnaire was used having 0.86 index using Cronbach alpha. Results revealed that the level of COVID-19 stressors on employees' mental health, when taken as an entire group was "Moderate," which means that the COVID-19 stressors moderately affected the employees' mental health. Female employees had the highest level of COVID-19 stressors, which affect their mental health more than males. Moreover, among the age groups, those 56-60 years old had the lowest level of COVID-19 stressors, which affected their mental health. Single employees had a higher level of COVID-19 stressors than married. One-way ANOVA showed no significant differences in the COVID-19 stressors on employees' mental health in terms of age, length of service, and educational attainment but significant on employees' position in the university. The t-test of independent samples showed a significant difference in the COVID-19 stressors on employees' mental health when classified according to sex while no significant difference when classified according to civil status. The researchers recommend to create a proactive mental health programs to inculcate awareness and action on female employees' mental health and wellbeing such as conduct of webinars on coping mechanisms and work-life balance; collaboration with mental health professionals like Department of Health (DOH) psychologists to offer free digital services or online consultations; and hosting talks with inspirational female leaders.

INTRODUCTION

The World Health Organization (WHO, 2020) classified coronavirus disease (COVID-19) as a pandemic in 2020. That means a worldwide disease that poses a hazard to the entire globe and may affect various people differently. Coronavirus is a new virus which has been discovered in December 2019 after an outbreak in Wuhan, China. It has now expanded across numerous countries at a breakneck pace. According to WHO (2020), the virus had spread to 202 nations, regions, or territories as of March 31, 2020, with 693,224 confirmed cases and 33,391 fatalities.

To contain the spread of the virus, working from home (WFH) has become the new method of working for millions of employees worldwide. As a result of the pandemic, many workers and employers were forced to switch to remote work for the first time, with little or no preparation (Ahrendt *et al.*, 2020). Adopting this flexible method of working is typically presented as a deliberate decision that necessitates a time of planning, preparation, and adaptation for employers to successfully support employees' productivity and provide them with a better work-life balance (Toscano & Zappala, 2020). However, most organizations have been compelled to embrace this mode of working as a result of the COVID-19 pandemic, frequently without equipping employees with the requisite skills for remote work as well as the equipment they have available in their respective homes or the capability of their internet connection (Molino *et al.*, 2020).

The present study utilized the Attribution Theory. Heider

(1958) postulated that in Attribution Theory people find reasons for the causes of their actions. As such, this study looks for the COVID-19 stressors that affect the employees' mental health.

Objectives of the Study

This study was conducted to determine the level of COVID-19 stressors on employees' mental health among employees of John B. Lacson Foundation Maritime University (Arevalo), Inc. for the school year 2021-2022 that will serve as a basis for making a program to enhance employees' mental health. Specifically, this study aimed to:

1. identify the levels of COVID-19 stressors on employees' mental health when taken as an entire group and when classified according to position in the university, age, sex, civil status, length of service, and educational attainment
2. determine if there are no significant differences in the COVID-19 stressors on employees' mental health when classified according to position in the university, age, sex, civil status, length of service, and educational attainment
3. draft a program to enhance the employees' mental health

LITERATURE REVIEW

The COVID-19 had not only puts people's health and lives in jeopardy, but it also has the potential to have detri-

¹ John B. Lacson Foundation Maritime University (Arevalo), Inc. Sto. Niño Sur, Arevalo, Iloilo City 5000, Philippines

* Corresponding author's e-mail: briangilsarinas@gmail.com

mental psychological repercussions for human communities in the short and long term. Faced with this epidemiological disaster, people have exhibited anxiety-related behaviors, resulting in a substantial shortage of sanitizers and medical masks. Several early research on COVID-19's psychological impacts revealed a high prevalence of anxiety, depression, stress (Wang *et al.*, 2020), sleeplessness (Hao *et al.*, 2020), and post-traumatic stress disorder (Tan *et al.*, 2020; Wang *et al.*, 2020) to humans. However, not everyone who is subjected to these stressors will experience unfavorable effects; those who are well-equipped to cope with the stressors may be able to redirect their psychological and cognitive resources to deal with impending or concurrent challenges (Lazarus, 1993).

The pandemic could severely effect the mental health of the general population and workers. Experts say that persons who have had mental difficulties in the past, as well as, those who have never had symptoms, may be at risk (Rajkumar, 2020). At the hype of its outbreak, psychological support may be very frequent and beneficial. Throughout the history of epidemics, the public has generally utilized more psychological coping mechanisms, such as problem-focused coping and seeking social support, as negative stress consequences have increased (Chew *et al.*, 2020). Although further research is needed to determine the effectiveness of psychological support in combating the stress repercussions of COVID-19, an early report found that social support was negatively associated with the degree of anxiety and stress that impacts an individual's mental health (Xiao *et al.*, 2020). Nevertheless, considering the prevalence of COVID-19-related stressors in recent years and the accessibility of psychological stressors as a possible protective mechanism, additional investigation of this buffering effect is necessary. So far, no previous studies have investigated whether psychological support serves as a protective factor that buffers the negative influence of COVID-19 stressors on stress outcomes and as a moderator in the indirect relationship between COVID-19 stressors and stress consequences via rumination (Ye *et al.*, 2020).

Indeed, it appears that during a pandemic outbreak, particularly one caused by an unknown new virus, individuals' mental health difficulties are frequently disregarded. The point of this study is to identify the COVID-19 stressors on employees' mental health as a foundation for developing an enhancement program.

METHODOLOGY

Research Design

The study utilized survey as a research design. A survey design examines a sample of a population to produce a quantitative or numeric description of trends, attitudes, or opinions. The researcher extrapolates or makes conclusions about the entire population based on sample results (Creswell, 2014). The present study focused on determining the level of COVID-19 stressors on

employees' mental health at John B. Lacson Foundation Maritime University (Arevalo), Inc. at Iloilo City, Philippines.

Respondents

The 124 respondents of this study were the employees of JBLFMU (Arevalo), Inc. during the second semester, school-year 2021-2022 taken through simple random sampling. The respondents were grouped according to their position in the university (BSMT Faculty, SHS Faculty, and Staff), age, sex (male and female), civil status (single and married), length of service, and educational attainment.

Instrument

A validated and reliability-tested questionnaire was used to determine the level of COVID-19 stressors on employees' mental health. Cronbach alpha was used to determine the reliability coefficient with a value of 0.86. This questionnaire consisted of 20 items with the following response options: Always, Very Often, Sometimes, Rarely, and Never.

Data Collection

The researchers secured permission to conduct the survey from the Office of the Administrator. Then, the researchers distributed the instrument to the employees of JBLFMU (Arevalo), Inc. through Google Form and sent it in various group chats in the month of March 2022. After two months, the online questionnaires were retrieved. Upon the retrieval of the accomplished copies of the instrument, the responses were tallied, analyzed, and interpreted.

Data Analysis

The data gathered for this research were subjected to appropriate descriptive statistics and inferential statistics. These were analyzed using descriptive statistical tools such as frequency, percentage, mean, and standard deviation. Frequency was used to determine the personnel-related factors of the respondents. Percentage was used to determine the percent of the frequency in the personnel-related factors of the respondents. The mean was used to determine the levels of COVID-19 stressors on employee's mental health according to position in the university, age, sex, civil status, length of service, and educational attainment. Table 1 shows the mean scale, descriptive rating, and indicators for interpreting the levels of COVID-19 stressors on employees' mental health. While standard deviation was used to determine the homogeneity of responses towards the COVID-19 stressors on employees' mental health.

One-way ANOVA was used to determine the significant difference in the COVID-19 stressors on employees' mental health when classified according to position in the university, age, length of service, and educational attainment set at .05 level of significance. The t-test for independent samples was used to determine the

Table 1: Mean scale, descriptive rating, and indicators for interpreting the level of COVID-19 stressors on employees’ mental health

Mean Scale	Descriptive Rating	Indicators
4.51 – 5.0	Very High	Very highly affect employees’ mental health
3.51 – 4.50	High	Highly affect employees’ mental health
2.51 – 3.50	Moderate	Moderately affect employees’ mental health
1.51 – 2.50	Low	Slightly affect employees’ mental health
1.0 – 1.50	Very Low	Minimally affect employees’ mental health

significant difference in the COVID-19 stressors on employees’ mental health when classified according to sex and civil status set at .05 level of significance.

RESULTS AND DISCUSSION

Levels of COVID-19 Stressors on Employees’ Mental Health

Figure 1 shows that the level of COVID-19 stressors on employees’ mental health, when taken as an entire group is “Moderate” (M=3.22), which means that the COVID-19 stressors moderately affect the employees’ mental health.

Among the three positions of employees, the highest level of COVID-19 stressors which affect employees’ mental health belongs to the Senior High School (SHS) Faculty (M=3.58, “High”), followed by the Staff (M=3.05, “Moderate”), and BSMT Faculty (M=3.04, “Moderate”). This means that the COVID-19 stressors highly affect the SHS faculty’s mental health; however, such stressors moderately affect the staff, and BSMT faculty. The study of Baker *et al.* (2021) supports these findings for teachers who experienced more stressors reported worse mental health and found it harder to cope and teach.

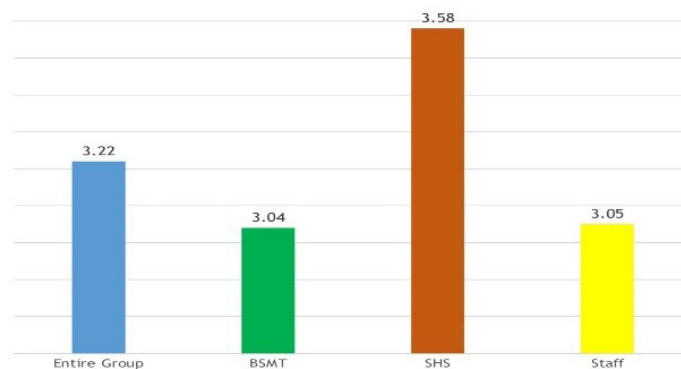


Figure 1: Levels of COVID-19 Stressors on Employees’ Mental Health when taken as an Entire Group and when classified according to Position in the University

Figure 2 shows that when the employees are classified according to age bracket, the levels of COVID-19 stressors for 24-30 group highly affect employees’ mental health (M=3.54) while the levels of COVID-19 stressors moderately affect employees’ mental health for age groups 31-35 (M=3.21), 36-40 (M=3.12), 41-45 (M=2.99), 46-50 (M=2.97), 51-55 (M=3.26), 56-60 (M=2.72), and 61-65

(M=2.94). The result, however reveals that among the age groups, those 56-60 years old have the lowest levels of COVID-19 stressors, which affect their mental health. This contradicts the findings of several studies that show older adults or the elderly population are more likely to experience increased anxiety and depression because of higher threat of illness and loss of social support. On the

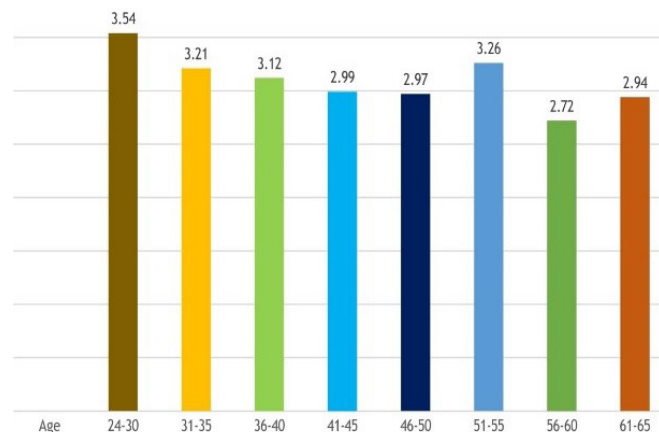


Figure 2: Levels of COVID-19 Stressors on Employees’ Mental Health when classified according to Age Bracket

other hand, older adults perceived higher levels of family support, which could help them avoid experiencing negative emotions (Fisher & Nussbaum, 2015). Meanwhile, when the employees are classified according to sex, the result reveals that female (M=3.37, “Moderate”) employees have the highest level of COVID-19 stressors, which affect their mental health than male (M=3.05, “Moderate”) employees, as shown in Figure 3. This supports the findings of Nagasu *et al.* (2021) that during the pandemic, more females experienced vague anxiety than males and were more concerned about their own health than their male counterparts.

When the employees are grouped according to civil status, single (M=3.39, “Moderate”) employees have higher levels of COVID-19 stressors than married

(M=3.14, “Moderate”) employees, as shown in Figure 4. These stressors moderately affect their mental health. This suggests that married individuals coped well and experienced less stress than single individuals (Lawal *et al.*, 2022) in terms of managing the effects of COVID-19 stressors. This finding is in line with Hossain and Akhter (2020), who also recorded significant differences in mental health indicators based on individuals’ marital status. This may be attributed to the fact that compared to single employees, married employees have their spouses and children to discuss or share their emotions. Further, married employees can also pool financial resources together with their spouses or children to lessen the burden of responsibilities that could result in their mental breakdown.

Considering the length of service of employees in Figure

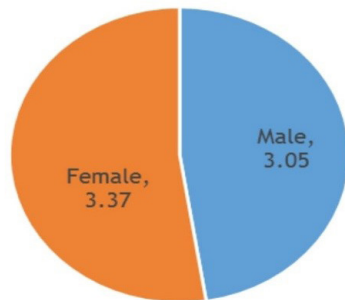


Figure 3: Levels of COVID-19 Stressors on Employees’ Mental Health when classified according to Sex

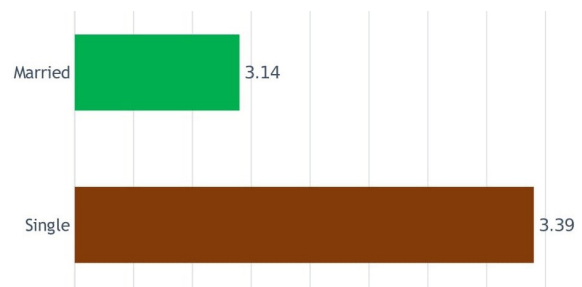


Figure 4: Levels of COVID-19 Stressors on Employees’ Mental Health when classified according to Civil Status

5, those who have served the university from 1-5 years (M=3.45) have the highest level of COVID-19 stressors, which moderately affect employees’ mental health, followed by 6-10 years (M=3.28), 31-35 years (M=3.21), 11-15 years (M=3.10), 21-25 years (M=3.09), 26-30 years (3.06), and lastly, 16-20 years (M=2.86). This means that

newly hired employees have more difficulty managing the effect of COVID-19 stressors on their mental health than other employees. Further, these newly hired employees are worried about the effect of COVID-19 on their employment, and greater job insecurity due to COVID-19 (Wilson *et al.*, 2020) contributes to the poor mental health

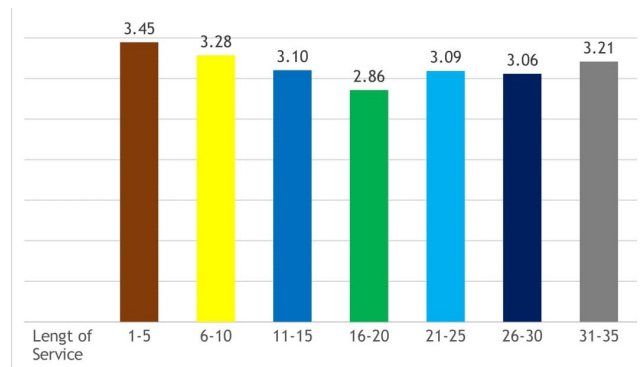


Figure 5: Levels of COVID-19 stressors on employees’ mental health when classified according to length of service

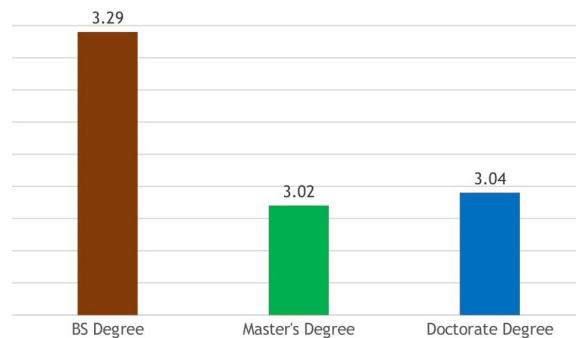


Figure 6: Levels of COVID-19 stressors on employees’ mental health when classified according to length of service

of said employees.

In terms of educational attainment of employees, those with BS degree (M=3.26) have the highest level of COVID-19 stressors, which moderately affect employees' mental health, followed by doctorate degree holders (M=3.04) and master's degree holders (M=3.02) as shown in Figure 6. This however contradicts the findings of Lawal *et al.* (2022) that postgraduate degree holders coped better because they are highly educated, more knowledgeable, and well-informed about the challenges associated with COVID-19 and how to cope with them.

Significant Difference in the COVID-19 Stressors on Employees' Mental Health

Table 2 shows the One-way ANOVA results of the COVID-19 stressors on employees' mental health when classified according to employees' position in the university, age, length of service, and educational attainment.

There is a significant difference in the COVID-19 stressors on employees' mental health when classified according to employees' position in the university, $F(2, 120) = 4.400, p = .014$. This suggests that the overall mental health of employees is influenced by their position as their tasks and responsibilities differ from each other. The effect of these stressors on employee's mental health varies according to employee's occupational role or position and their workload (Hamouche, 2020) in an institution. Faculty or teachers who experienced more stressors reported worse mental health and found it harder to cope and teach (Baker *et al.*, 2021) than the staff.

Moreover, there is no significant difference in the

COVID-19 stressors on employees' mental health when classified according to employees' age, $F(38, 85) = 1.214, p = .229$. This implies that there is no significant influence of employees' age on the overall mental health of the employees. Although younger age is associated with lower psychological stress, older adults are more likely to have gained greater resilience and coping skills in managing both work and life challenges with experience and maturity, lowering the risk (Chan *et al.*, 2020) of the effect of COVID-19 stressors in the mental health of both age groups.

Furthermore, there is no significant difference in the COVID-19 stressors on employees' mental health when classified according to employees' length of service, $F(29, 94) = 1.258, p = .203$. This indicates that coping with the COVID-19 stressors on employees' mental health is the same regardless of whether the employee is new in the institution or not. This, however, contradicts the findings of Hwang *et al.* (2021), which emphasized that short-tenured employees reported higher emotional exhaustion than older and more experienced employees. Lastly, there is no significant difference in the level of COVID-19 stressors on employees' mental health when classified according to employees' educational attainment, $F(2, 121) = 1.357, p = .261$. This suggests that educational attainment does not contribute to the level of COVID-19 stressors on employees' mental health. This is, however, inconsistent with the findings of Lawal *et al.* (2022) that employees with post-graduate degrees (master's and doctorate degree holders) coped well with the effects of COVID-19 stressors on their mental health than employees with bachelor's degrees.

Table 3 shows that BSMT faculty significantly differs in

Table 2: One-way ANOVA result for the COVID-19 stressors on employees' mental health according to position in the university, age, length of service, and educational attainment

Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.
Position					
Between Groups	5.017	2	2.509		
Within Groups	68.425	120	.570	4.400*	.014
Total	73.443	122			
Age					
Between Groups	25.873	38	.681		
Within Groups	47.671	85	.561	1.214	.229
Total	73.544	123			
Length of Service					
Between Groups	20.566	29	.709		
Within Groups	52.978	94	.564	1.258	.203
Total	73.544	123			
Educational Attainment					
Between Groups	1.614	2	.807		
Within Groups	71.930	121	.594	1.357	.261
Total	73.544	123			

Note. Asterisk (*) means significant at .05 level of probability.

the COVID-19 stressors with the SHS faculty simply because their tasks and responsibilities differ from each other. This finding supports the study of Hamouche (2020).

On the other hand, Table 4 shows the t-test of **Table 3:** Post-hoc result for the COVID-19 stressors on employees' mental health according to position in the University

Position in the University	Mean
BSMT Faculty	3.04 ^a
SHS Faculty	3.66 ^b
Staff	3.20 ^{ab}

independent samples result in the COVID-19 stressors on employees' mental health when classified according to sex and civil status. The result indicates a significant difference in the COVID-19 stressors on employees' mental health when classified according to sex, $t(122) = 2.556$, $p = .012$. It shows that COVID-19 stressors have a high effect on female ($M=3.40$) employees than male

Table 4: t-test for independent samples results for the COVID-19 stressors on employees' mental health according to sex and civil status

Sources of Variation	Mean	SD	t	df	Sig.
Sex					
Female	3.40	0.72	2.556*	122	.012
Male	3.05	0.79			
Civil Status					
Single	3.39	0.67	1.629	122	.106
Married	3.14	0.81			

Note. Asterisk (*) means significant at .05 level of probability.

Since COVID-19 stressors moderately affect the employees' mental health, an enhancement program was developed. This program consists of Objectives, Activities, Participants/Beneficiaries, Timeline, Budget, and Expected Outcomes. The specific activities include: 1. Conducting webinars on coping mechanisms and work-life balance; 2. Partnering with mental health experts such as DOH psychologists to provide digital service or online consultation for free; and 3. Conducting talks inviting successful women leaders as inspirational speakers. This enhancement program may help university employees to surmount the obstacles presented by the new system of education (Talahiban *et al.*, 2022).

CONCLUSIONS

This study concludes that the COVID-19 stressors moderate affect the mental health of JBLFMU (Arevalo), Inc. employees. These stressors could be gleaned on their position in the university and sex. The SHS faculty tend to be more affected than the staff and BSMT faculty. Likewise, female employees' mental health is more affected by the COVID-19 stressors than their male counterparts. The majority of the SHS faculty are female; thus, it is determined that their level of COVID-19 stressors highly

($M=3.05$) employees' mental health. Moreover, more females experienced vague anxiety than males and were more concerned about their own health than their male counterparts (Halonon *et al.*, 2018). Furthermore, female employees felt more emotionally exhausted (Hwang *et al.*, 2020) in dealing with the effects of COVID-19 on their mental health and well-being.

While the result of the t-test of independent samples indicates that there is no significant difference in the COVID-19 stressors on employees' mental health when they are classified according to civil status, $t(122) = 1.629$, $p = .106$. It implies that COVID-19 stressors affect both single ($M=3.39$) and married ($M=3.14$) employees' mental health. These findings contradict with the study of Chan *et al.* (2021), where single employees are more likely to be psychologically distressed than their married counterparts. This indicates that the absence of social support from the married employee's spouse and children contributes to poorer mental health to single employees (Tamminen *et al.*, 2019).

Enhancement Program for Employees' Mental Health

affect their mental health.

RECOMMENDATIONS

The following recommendations were made: The University may create a proactive Mental Health Program which will drive awareness and action on female employees' mental health and well-being. Specifically, the management may facilitate the following: 1) conduct webinars on coping mechanisms, and work-life balance, 2) partner with mental health experts such as with Department of Health (DOH) Psychologists to provide digital service or online consultation for free, and 3) conduct talks inviting successful women leaders as inspirational speakers.

REFERENCES

Ahrendt, D., Cabrita, J., & Clerici, E. (2020). Living, working and COVID-19. Luxembourg: Publications Office of the European Union.
 Baker, C. N., Peele, H., Daniels, M., Saybe, M., Whalen, K., & Overstreet, S. (2021). The experience of COVID-19 and its impact on teachers' mental health, coping, and teaching. *School Psychology Review*, 50(4), 491-504. <https://doi.org/10.1080/2372966X.2020.1855473>

- Chan, C. M. H., Ng, S. L., In, S., Wee, L. H., & Siau, C. S. (2021). Predictors of psychological distress and mental health resource utilization among employees in Malaysia. *International Journal of Environmental Research and Public Health*, 18(1), 1-15. <https://doi.org/10.3390/ijerph18010314>
- Chew, Q. H., Wei, K. C., Vasoo, S., Chua, H. C., & Sim, K. (2020). Narrative synthesis of psychological and coping responses towards emerging infectious disease outbreaks in the general population: Practical considerations for the COVID-19 pandemic. *Singapore Medical Journal*, 61(7), 350-356. <https://doi.org/10.11622/smedj.2020046>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. 4th ed. USA: Sage Publications.
- Fisher, C. L., & Nussbaum, J. F. (2015). Maximizing wellness in successful aging and cancer coping: The importance of family communication from a socioemotional selectivity theoretical perspective. *Journal of Family Communication*, 15(1), 3-19.
- Halonen, J. I., Koskinen, A., Varje, P., Kouvonen, A., Hakanen, J. J., & Väänänen, A. (2018). Mental health by gender-specific occupational groups: Profiles, risks and dominance of predictors. *Journal of Affective Disorders*, 238, 311-316. <https://doi.org/10.1016/j.jad.2018.06.007>
- Hamouche, S. (2020). COVID-19 and employees' mental health: Stressors, moderators and agenda for organizational actions. *Emerald Open Research*, 2, 1-15. <https://doi.org/10.35241/emeraldopenres.13550.1>
- Hao, F., Tan, W., Jiang, L., Zhang, L., Zhao, X., Zou, Y., Hu, Y., Luo, X., Jiang, X., McIntyre, R. S., Tran, B., Sun, J., Zhang, Z., Ho, R., Ho, C., & Tam, W. (2020). Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry. *Brain, Behavior, and Immunity*, 87, 100-106. <https://doi.org/10.1016/j.bbi.2020.04.069>
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Hossain, S. M. K., & Akhter, M. (2020). The outbreak of novel coronavirus disease (COVID-19) pandemic: Consequences on public mental health. *Journal of Brain Sciences*, 3(1), 1-15.
- Hwang, H., Hur, W.-M., & Shin, Y. (2021). Emotional exhaustion among the South Korean workforce before and after COVID-19. *Psychology and Psychotherapy: Theory, Research and Practice*, 94, 371-381.
- Lawal, A. M., Alhassan, E. O., Mogaji, H. O., Odoh, I. M., & Essien, E. A. (2022). Differential effect of gender, marital status, religion, ethnicity, education and employment status on mental health during COVID-19 lockdown in Nigeria. *Psychology, Health & Medicine*, 27(1), 1-12. <https://doi.org/10.1080/13548506.2020.1865548>
- Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44(1), 1-22.
- Molino, M., Ingusci, E., Signore, F., Manuti, A., Giancaspro, M. L., Russo, V., Zito, M., & Cortese, C. G. (2020). Wellbeing costs of technology use during Covid-19 remote working: An investigation using the Italian translation of the technostress creators scale. *Sustainability*, 12, 1-20.
- Nagasu, M., Muto, K., & Yamamoto, I. (2021). Impacts of anxiety and socioeconomic factors on mental health in the early phases of the COVID-19 pandemic in the general population in Japan: A web-based survey. *PLoS ONE*, 16(3), 1-19.
- Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian Journal of Psychiatry*, 52, 1-5.
- Talahiban, M. J. L., Malabarbas, G. T., Amoto, B. L., & Mendoza, J. B. (2022). Teaching competencies and coping mechanisms in the new normal education among public elementary teachers. *American Journal of Multidisciplinary Research and Innovation*, 1(3), 63-71.
- Tamminen, N., Kettunen, T., Martelin, T., Reinikainen, J., & Solin, P. (2019). Living alone and positive mental health: A systematic review. *Systematic Reviews*, 8 (134), 1-8.
- Tan, W., Hao, F., McIntyre, R. S., Jiang, L., Jiang, X., Zhang, L., Zhao, X., Zou, Y., Hu, Y., Luo, X., Zhang, Z., Lai, A., Ho, R., Tran, B., Ho, C., & Tam, W. (2020). Is returning to work during the COVID-19 pandemic stressful? A study on immediate mental health status and psychoneuroimmunity prevention measures of Chinese workforce. *Brain, Behavior, and Immunity*, 87, 84-92. <https://doi.org/10.1016/j.bbi.2020.04.055>
- Toscano, F., & Zappalà, S. (2020). Smart working in Italia: origine, diffusione e possibili esiti [Smart working in Italy: Origin, diffusion and potential outcomes]. *Psicologia Sociale*, 15(2), 203-223.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (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*, 17(5), 17-29. <https://doi.org/10.3390/ijerph17051729>
- WHO. (2020). *Coronavirus Disease (COVID-19) Situation Dashboard*. Geneva: World Health Organization.
- Wilson, J. M., Lee, J., Fitzgerald, H. N., Oosterhoff, B., Sevi, B., & Shook, N. J. (2020). Job insecurity and financial concern during the covid-19 pandemic are associated with worse mental health. *Journal of Occupational and Environmental Medicine*, 62(9), 686-691. <https://doi.org/10.1097/JOM.0000000000001962>
- Xiao, H., Zhang, Y., Kong, D., Li, S., & Yang, N. (2020). The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China medical science monitor. *International*

Medical Journal of Experimental and Clinical Research, 26,
1-8. <https://doi.org/10.12659/MSM.923549>
Ye, B., Wu, D., Im, H., Liu, M., Wang, X., & Yang,
Q. (2020). Stressors of COVID-19 and stress

consequences: The mediating role of rumination
and the moderating role of psychological support.
Children and Youth Services Review, 118, 1-8. [https://doi.
org/10.1016/j.childyouth.2020.105466](https://doi.org/10.1016/j.childyouth.2020.105466)