

Psychology Research on Education and Social Sciences, 4(2), 49-57, June 2023 e-ISSN: 2717-7602

dergipark.org.tr/press



Research Article

Investigating the effects of a mental health symposium on knowledge, attitudes, and practices of college student leaders in a rural institution in the Philippines

Resti Tito H. Villarino^{1*} and Maureen Lorence F. Villarino²

1Local Research Ethics Committee, Cebu Technological University, Moalboal, Cebu, Philippines

Article Info

Received: 5 May 2023 Accepted: 25 June 2023 **Online:** 30 June 2023

Keywords:

Conscientiousness College students Mental health Mental health stigma Well-being

2717-7602 / © 2023 The PRESS. Published by Young Wise Pub. Ltd. This is an open access article under the CC BY-NC-ND license



Abstract

This study aimed to investigate if there was a significant difference in the knowledge, attitudes, and practices of 122 college student leaders in a rural institution in the Philippines pre-and post-mental health symposium. The study utilized a mixed methodology, mainly a pretest-posttest design. The participants completed an adapted and validated online instrument before and after the symposium, and the data were analyzed using IBM SPSS Statistics 27 and MAXQDA version 2020. While there were no significant differences between the pre-and posttest results, participants showed an increased understanding and tolerance of mental health challenges. In the focus group discussions, the participants were generally willing to help friends with mental health problems and integrate people with mental illnesses into the community. The study also highlighted a need for increased awareness and understanding of mental health and wellbeing in society and the importance of reducing stigma and supporting individuals with mental health challenges. In conclusion, despite improvements in knowledge and attitudes, stigma-related mental health knowledge remains critical in promoting awareness and support for individuals with mental health challenges. Moreover, our study emphasizes the importance of increased government spending on mental health services and promoting inclusivity and support for individuals with mental health challenges in the community.

To cite this article

Villarino, R.T.H.& Villarino, M.L.F. (2023). Investigating the effects of a mental health symposium on knowledge, attitudes, and practices of college student leaders in a rural institution in the Philippines. Psychology Research on Education and Social Sciences, 4(2), 49-57.

Introduction

The issue of mental health and well-being among university students is a global concern (Sawadogo et al., 2020). Several studies have suggested that a significant number of students experience poor mental health while in college (Aggarwal et al., 2013; Barrable et al., 2018; Basu et al., 2017; Dalky & Gharaibeh, 2019; R. T. Villarino, 2023; Villarino et al., 2022a). The World Health Organization's International College Student Initiative, which surveyed 19 colleges/universities in eight countries, found high rates of mental disorders among university students (World Health Organization, 2020). This has led universities to focus on understanding the extent and nature of mental health issues to develop appropriate prevention, promotion, and support programs (Villarino et al., 2022b).

In the Philippines, studies on university students have shown varying prevalence rates of mental health problems or disorders compared to the general adult population (Lally et al., 2019; Paler et al., 2022; Pedrelli et al., 2015). The Mental Health Act of the Philippines (Lally et al., 2019) has identified specific concerns and needs of college students, such as

¹ Corresponding author: Dr., Local Research Ethics Committee, Cebu Technological University, Moalboal, Cebu, Philippines and 3Medical Sciences Division, National $Research\ Council\ of\ the\ Philippines,\ Manila,\ Philippines.\ E-mail:\ restitito.villarino @ctu.edu.ph\ ORCID:\ 0000-0002-5752-1742$

² 2College of Nursing, West Visayas State University, Lapaz, Iloilo City, Philippines and Medical Sciences Division, National Research Council of the Philippines, Manila, Philippines. E-mail: maureenlorencevillarino@gmail.com ORCID: 0000-0002-7840-2849

potentially elevated levels of distress and mental health problems, a higher risk of suicidal behaviors, and barriers to access mental health services. The report recommends expanding online mental health services, improving health insurance coverage for college students' mental health services, and requiring all tertiary institutions to have a student mental health and well-being strategy.

Mental health literacy is a crucial factor in prevention and promotion efforts. It refers to knowledge and beliefs about mental disorders that aid their recognition, management, or prevention (Birkie & Anbesaw, 2021; LaMontagne et al., 2023; Sawadogo et al., 2020). High mental health literacy is associated with greater intentions to seek help among university students (Barrable et al., 2018; Morgan & Simmons, 2021; Villarino et al., 2022a). On the other hand, poor mental health literacy reduces the likelihood of seeking appropriate professional treatments and therapies for mental health problems. Stigmatizing attitudes can also hinder service use and may lead to unsupportive, discriminatory behaviors towards people with mental health problems (Aggarwal et al., 2013; Britt et al., 2020). Interventions that target mental health literacy, stigma reduction, and helping behaviors can inform evolving policies and practices in the university sector (Hernández-Torrano et al., 2020; Villarino et al., 2022b; Zahid Iqbal et al., 2021).

This study aimed to address a critical gap by exploring whether there is a significant difference in knowledge, attitude, and practices among college student leaders in a rural institution in the Philippines after attending a symposium on mental health and well-being.

Method

Study Design

This investigation employed the mixed-method pretest-posttest design. Data on the participants' knowledge, attitude, and practices on mental health and well-being were taken before and after the symposium. Additionally, the participants provided insights on the knowledge, attitude, and practices of mental health and well-being statements through a focus group discussion after the symposium.

Setting, Participants, Inclusion, and Exclusion Criteria

The setting of the study was a state university in Cebu, Philippines. The participants were college student leaders in the ten organizations in the aforementioned institution. We chose the student leaders as our participants because they were the suitable population to study regarding mental health, as they have a higher level of involvement in campus activities and may influence the broader student population's knowledge, attitudes, and practices regarding mental health. Moreover, the mental health symposium conducted was part of the information and awareness drive initiated by the Supreme Student Government in collaboration with the Guidance and Counselling Office in promoting mental health and well-being among the college students in the university. College students who were not student leaders in the different organizations were excluded from the study.

Sample Size and Sampling Method

The sample size included in the study was 122 student leaders in the different organizations at the university. These were the Fisheries Student Council (FiSCo), Supreme Student Government (SSG), Musical Ensemble, Ang Taga (Student Publication), College of Arts and Sciences (CASEL) SOCIETY, Bachelor of Industrial Technology Council (BITCO), Hospitality Management Student Council (HOMSCO), Future Science and Technology Leaders of the Philippines (FSTLP), Industrial Engineering Students Council (IESC), and the College of Education (COEd). The sampling used was a purposive sampling method.

Ethics

The University Research Ethics Committee [UREC] of Cebu Technological University granted ethical approval to the data collecting procedures, informed consent forms, and data collection instruments. The participants received a certificate of participation after the duration of the study.

Instrument

The tool utilized in this research was adapted and revised from the investigation conducted by Basu et al. (2017) and contained eight statements relating to mental health challenges and stigma. Nine statements were used to assess attitude, including fear about mental health challenges, understanding and acceptance of mental health challenges, integration of individuals with mental health issues into the community, and the causes of mental health challenges. For practices related to mental health and well-being, the instrument included statements such as "I am capable of maintaining a relationship with a friend who experiences mental health issues," "I am capable of collaborating with someone who experiences mental health issues," and "I am capable of living with someone who experiences mental health issues." On a five-point Likert scale, participants rated their level of agreement with each statement. Following the collection of completed instruments, the principal investigator verified the accuracy and completeness of the participants' responses.

The Mental Health and Well-being Symposium Program

The mental health and well-being symposium's content was based on a study conducted by Villarino et al. (2022c), held on April 27, 2023, from 9:00 AM to 5:00 PM. The symposium covered several topics in the morning, including Introduction to the Online Health and Well-being Program, Health, Fitness, and Wellness, The Mental Health Continuum, and Understanding Mental Health and Mental Illness. Meanwhile, the afternoon session covered Mental Health Promotion, Seligman's PERMA model of subjective well-being, and Cognitive Behavioral Therapy (CBT) for Health and Wellness. The lead researcher conducted the sessions, and each topic lasted 45 to 60 minutes, with participants allowed to ask questions after each session. Focus group discussions and dialogue sessions took place after the symposium, and participants were provided with PDF pamphlets and Powerpoint® Slides.

Scoring Procedure

The five-point Likert Scale was provided to assess the level of agreeableness of the participants on the different statements on their knowledge, attitude, and practices on mental health and well-being.

Table 1. Scoring range for the level of agreeableness of the participants on their knowledge, attitude, and practices on mental health and well-being

Scale	Range	Verbal Description	Explanation				
5	4.20-5.00	Strongly Agree	The level of agreeableness towards the statement is very high				
4	3.40-4.19	Agree	The level of agreeableness towards the statement is high				
3	2.60-3.39	Uncertain	The level of agreeableness towards the statement is neither high nor low				
2	1.80-2.59	Disagree	The level of agreeableness towards the statement is low				
1	1.00-1.79	Strongly Disagree	The level of agreeableness towards the statement is very low				

Statistical Analysis

The participants' profile were expressed in frequencies and percentages. Their knowledge, attitudes, and practices on mental health and well-being were expressed as means with standard deviations. To determine if significant differences exist between the pre-post results, a paired independent t-test was used. The content analysis method was utilized to evaluate the results of the focus group discussions among the participants after the symposium. All quantitative data were analyzed using IBM SPSS Statistics 27, and qualitative data were analyzed using MAXQDA version 2020.

Results

Profile of the Participants

As presented in Table 1, most participants are aged 24 and below. This age group makes up 72.95% of the total participants, while the 25-34 age group and the 35 and above age group make up 14.75% and 12.30%, respectively. Regarding sex, females are the majority, comprising 55.73% of the total participants. Conversely, males comprise only 36.88% of the total participants, while those who prefer not to say constitute 7.38%.

Table 2. Participants demographics structures

	Frequencies (N=122)	Percentage		
Age		_		
24 years old and below	89	72.95		
25-34 years old	18	14.75		
35 and above	15	12.30		
Sex				
Male	45	36.88		
Female	68	55.73		
Prefer not to say	9	7.38		

Test of Significant Difference between the Pre-and Post-Knowledge on Mental Health and Well-being

Table 2 presents the participants' pretest knowledge of mental health and well-being. The mean for statements describing someone with mental health challenges is (3.32 ± 0.82) , with a verbal description of uncertain. On the other hand, the mean for stigma-related mental health knowledge is 3.61, with a standard deviation of ±0.67 and a verbal description of agree. This indicates that in the pretest, the participants were uncertain about certain aspects of mental health, such as when someone with mental health challenges cannot be held responsible for their actions, the severity of depression, stress, and anxiety, whether someone should be hospitalized, and the curability of mental health conditions. However, they agreed that counseling and medication are effective treatments; they know how to advise a friend with mental health challenges to seek professional help.

In the posttest results, the mean for statements describing someone with mental health challenges is (3.41 ± 1.04) , with a verbal description of agree. The mean for stigma-related mental health knowledge is 3.89, with a standard deviation of ±1.03 and a verbal description of agree. This indicates that after the symposium, the participants agreed that certain factors affect an individual's responsibility for their actions in dealing with mental health challenges. They also recognized that mental health conditions like depression, stress, and anxiety can affect an individual's ability to function, and they acknowledged the curability of mental health conditions. Additionally, the participants knew about the stigma associated with mental health.

The test of significant difference between the pre-and post knowledge on mental health and well-being had a computed t and p-value of (t=-1.30,p=0.19). The result indicates no statistically significant difference between the pre-and post-knowledge of the participants on their mental health and well-being.

Table 2. Significant difference between the pre-and post-knowledge on mental health and well-being

Knowledge									
	Pretest Mean	SD	VD	Posttest Mean	SD	VD	p-value		
Statements that describe	3.32	±0.82	Uncertain	3.41	±1.04	Agree	0.19		
that someone is having									
mental health challenges									
Stigma-related mental	3.61	± 0.67	Agree	3.89	± 1.03	Agree			
health knowledge									

N=122; SD: Standard Deviation; VD: Verbal Description: Strongly Agree 4.20-5.00; Agree 3.40-4.19; Uncertain 2.60-3.39; Disagree 1.80-2.59; Strongly Disagree 1.00-1.79; Paired independent t-test; *Significance level at 0.05.

Test of Significant Difference between the Pre-and Post-Attitude on Mental Health and Well-being

As can be gleaned in Table 3, the pretest means on attitude concerning fear about mental health challenges (3.81, ± 0.44), integrating people with mental illness into the community (4.03, ± 0.73), and the causes of mental health challenges (3.88, ± 0.40) got an overall rating of agree. On the other hand, understanding and tolerance of mental health challenges (4.23, ± 0.23) got an overall rating of strongly agree. The findings indicate that in the pretest, the participants agree that they are willing to help friends with mental health challenges and that anyone can have them. Furthermore, the participants also strongly agree that the best therapy for people with mental health challenges is to be part of a normal community and that one of the causes of mental health challenges is a lack of willpower to seek help.

In the posttest means on attitude concerning fear about mental health challenges (4.14, ± 0.32) and the causes of mental health challenges (4.18, ± 0.64) got a rating of agree while understanding and tolerance of mental health challenges (4.54, ± 0.16), integrating people with mental illness into the community (4.54, ± 0.69) got an overall rating of strongly agree. The results indicate that the participants were willing to help friends with mental health challenges. Since understanding and tolerating mental health challenges and integrating people with mental illness into the community got an overall rating of strongly agree, it indicates that the participants strongly agree that being part of a normal community is the best therapy for people with mental health challenges.

The test of significant difference between the pre-and post attitude on mental health and well-being on fear about mental health challenges, integrating people with mental illness into the community, and the causes of mental health challenges got a computed t and p values that were more than the significance level of 0.05. Thus, the results indicate no significant differences between the pre and posttest results on these variables. However, understanding and tolerance of mental health challenges got a computed p-value of (0.02), indicating a statistically significant difference between the pre-and posttest results.

Table 3. Significant difference between the pre-and post-attitude on mental health and well-being

Attitude									
	Pretest	SD	VD	Posttest	SD	VD	p-value		
	Mean			Mean					
Fear about mental health challenges	3.81	±0.44	Agree	4.14	±0.32	Agree	0.13		
Understanding and tolerance of mental health challenges	4.23	±0.23	Strongly Agree	4.54	±0.16	Strongly Agree	0.02*		
Integrating people with mental illness into the community	4.03	±0.73	Agree	4.54	±0.69	Strongly Agree	0.06		
Causes of mental health challenges	3.88	±0.40	Agree	4.18	±0.64	Agree	0.12		

N=122; SD: Standard Deviation; VD: Verbal Description: Strongly Agree 4.20-5.00; Agree 3.40-4.19; Uncertain 2.60-3.39; Disagree 1.80-2.59; Strongly Disagree 1.00-1.79; Paired independent t-test; *Significance level at 0.05.

Test of Significant Difference between the Pre-and Post-Practices on Mental Health and Well-being

The pretest practices on mental health and well-being among the participants are presented in Table 4. In terms of practices, statements: I can continue a relationship with a friend who developed a mental health problem got a mean with standard deviation of (3.97, ± 0.66), I can work with someone with a mental health problem (3.70, ± 0.73), and I can live with someone with a mental health problem got an overall mean of (3.50, ± 1.01) with an overall rating of agree.

Similarly, in the posttest, statements: I can continue a relationship with a friend who developed a mental health problem got a mean with standard deviation of $(3.73, \pm 1.01)$, I can work with someone with a mental health problem $(4.00, \pm 0.77)$, and I can live with someone with a mental health problem got an overall mean of $(3.91, \pm 0.03)$ with an overall rating of agree. The findings indicate that the participants generally are proactive in their practices towards continuing a relationship, working, and living with someone with a mental health problem in both the pretest and posttest.

The test of significant difference between the pre-and post-practices on mental health and well-being had a computed t and p-value greater than the significance level of 0.05; thus, the results indicate no statistically significant difference between the pre-and post-practices of the participants on their mental health and well-being.

Table 4. Significant difference between the pre-and post-practices on mental health and well-being

Practices								
	Pretest	SD	VD	Posttest	SD	VD	p-value	
	Mean			Mean				
I can continue a relationship with a friend who developed a mental health problem.	3.97	±0.66	Agree	3.73	±1.01	Agree	0.79	
I can work with someone with a mental health problem.	3.70	±0.73	Agree	4.00	±0.77	Agree	0.66	
I can live with someone with a mental health problem.	3.50	±1.01	Agree	3.91	±0.83	Agree	0.12	

N=122; SD: Standard Deviation; VD: Verbal Description: Strongly Agree 4.20-5.00; Agree 3.40-4.19; Uncertain 2.60-3.39; Disagree 1.80-2.59; Strongly Disagree 1.00-1.79; Paired independent t-test; *Significance level at 0.05.

Content Analysis of the Focus Group Discussions on the Knowledge, Attitude, and Practices on Mental Health and Well-being Post-Symposium Knowledge of Mental Health and Well-being

Mental health challenges:

"Mental health challenges can affect a person's behavior and cognition. It does not necessarily mean that they cannot be held responsible for their actions." (FiSCo)

"It is important to understand that mental health challenges are like any other health condition and can be treated and managed with the right interventions, including therapy, medication, and lifestyle changes." (SSG)

"While a complete cure may not always be possible, many people with mental health challenges can recover and lead fulfilling lives with appropriate support and care." (CASEL) SOCIETY

Stigma-related mental health knowledge:

"Stigma-related mental health knowledge is critical in promoting understanding and support for individuals with mental health challenges. Unfortunately, many people still hold negative attitudes and beliefs about mental health, which can lead to stigmatization and discrimination." (BITCO)

"It is important to understand that mental health is not related to 'craziness' or any other negative stereotypes." (HOMSCO).

Attitude on Mental Health and Well-being

"Fear and stigma around mental health challenges are still prevalent in many societies, which can lead to discrimination and marginalization of individuals with mental health conditions. However, it is important to understand that mental health challenges are no different from any other health condition and can affect anyone regardless of age, gender, or background." (FSTLP)

"Understanding and tolerance of mental health challenges is an important issue that needs government and society's attention. The government should increase spending on mental health services to ensure that people with mental health challenges can access the necessary treatment and support." (IESC)

"Integrating people with mental illness into the community is crucial to promoting mental health and reducing stigma. Neighborhoods need to practice inclusivity and support people facing mental health challenges." (COEd)

"The statement 'There is something about people with mental health challenges that makes it easy to tell them apart from normal people' is a misconception and inaccurate. Mental health challenges do not have any physical or visible characteristics that distinguish them from 'normal' people. Mental health challenges can affect anyone, regardless of age, gender, race, or background." (Musical Ensemble)

Practices on Mental Health and Well-being

"It's possible to continue a relationship, work with, or live with someone with a mental health problem. Providing support and understanding to those with mental health challenges is crucial to their recovery and overall well-being." Ang Taga (Student Publication)

"When continuing a relationship with a friend with a mental health problem, it's important to approach the situation with empathy and understanding. Be patient, supportive, and non-judgmental, and encourage them to seek professional help if needed." (SSG)

"When working with or living with someone with a mental health problem, it's important to approach the situation with compassion and understanding. Please educate yourself about their condition, communicate openly and honestly, and provide support and accommodations. It's also important to respect their privacy and autonomy and to avoid stigmatizing language or behavior." (FSTLP)

Discussion and Conclusion

This study examined if there was a significant difference between the pre-and posttest knowledge, attitudes, and practices regarding mental health and well-being among college student leaders after a mental health symposium. In the pretest, the participants were uncertain about certain aspects of mental health, such as the severity of depression and anxiety, while agreeing that counseling and medication are effective treatments. In the posttest, participants agreed more on certain factors affecting an individual's responsibility for their actions and recognized the curability of mental health conditions. The participants' attitudes showed a general willingness to help friends with mental health challenges and integrate people with mental illness into the community. However, there were no significant differences between preand posttest results, except for the understanding and tolerance of mental health challenges. In terms of practices, participants were generally proactive towards continuing a relationship, working, and living with someone with a mental health problem in both the pre-and posttest.

Mental health challenges are becoming increasingly prevalent worldwide, and promoting awareness and reducing the stigma associated with mental health disorders is essential (Villarino et al., 2023). Our findings highlight mental health education's importance in promoting understanding and tolerance towards mental health challenges among college student leaders. The posttest results showed an increased awareness and recognition of the curability of mental health conditions and a willingness to help friends and integrate people with mental illnesses into the community. Recent studies (Barrable et al., 2018; Morgan & Simmons, 2021; Villarino et al., 2022) emphasize the need for mental health education among college students. These studies, as mentioned earlier, found that although most of the college student respondents recognized the importance of mental health awareness, they still lacked knowledge regarding specific mental health conditions and treatments. Furthermore, the stigma associated with mental health disorders persisted, hindering individuals from seeking help (Dalky & Gharaibeh, 2019; Pedrelli et al., 2015; Villarino, 2023). To promote mental health education among college students, incorporating mental health education into the college curriculum and creating a campus environment that promotes mental health awareness and support (Barrable et al., 2018; Eisenberg et al., 2009; Huckins et al., 2020).

Furthermore, the findings from the focus group discussions suggest a need for more knowledge and understanding of mental health and well-being in society. Mental health challenges can affect anyone, and it's essential to understand that these challenges are like any other health condition and can be treated and managed with the right interventions (Hernández-Torrano et al., 2020; Hyun, 2017). However, stigma-related mental health knowledge is still critical in promoting understanding and support for individuals with mental health challenges, as many still hold negative

attitudes and beliefs about mental health (Britt et al., 2020; Eisenberg et al., 2009). The attitudes towards mental health and well-being were influenced by fear and stigma, which can lead to discrimination and marginalization of individuals with mental health conditions (Britt et al., 2020; Pescosolido, 2013). It is crucial that the government increases spending on mental health services to ensure that people with mental health challenges can access the necessary treatment and support (Villarino et al., 2022a). Additionally, promoting inclusivity and supporting people facing mental health challenges in the community is necessary for promoting mental health and reducing stigma (Villarino et al., 2022b).

In terms of mental health and well-being practices, it was found that it is possible to continue a relationship, work with, or live with someone with a mental health problem. Providing support and understanding to those with mental health challenges is crucial to their recovery and overall well-being (Huckins et al., 2020; Zahid Iqbal et al., 2021). It is essential to approach the situation with empathy and compassion, be patient, supportive, and non-judgmental, and encourage them to seek professional help if needed (Basu et al., 2017; Sawadogo et al., 2020). When working with or living with someone with a mental health problem, it is also crucial to approach the situation with compassion and understanding, educate oneself about their condition, communicate openly and honestly, and provide support (LaMontagne et al., 2023; Pedrelli et al., 2015).

In conclusion, our study indicates a need for more understanding of mental health and well-being in society. Although participants' knowledge and attitudes improved after the study, stigma-related mental health knowledge is still critical in promoting awareness and support for individuals with mental health challenges. Our study also emphasizes the importance of increased government spending on mental health services and promoting inclusivity and support for individuals with mental health challenges in the community.

Recommendations

Future researchers should effectively explore strategies to reduce stigma and discrimination against mental health issues. Moreover, there is a need for more extensive research on the impact of mental health interventions, such as symposiums, seminars, and workshops on students' knowledge, attitudes, and practices. Future studies can also investigate the effectiveness of different mental health interventions for students in various settings, such as urban and suburban areas. Finally, more research is needed to evaluate the effectiveness of mental health policies and programs implemented by the government and institutions to support individuals with mental health challenges.

References

- Aggarwal, A. K., Thompson, M., Falik, R., Shaw, A., O'Sullivan, P., & Lowenstein, D. H. (2013). Mental Illness Among Us: A New Curriculum to Reduce Mental Illness Stigma Among Medical Students. *Academic Psychiatry*, 37(6), 385–391. https://doi.org/10.1007/BF03340074
- Barrable, A., Papadatou-Pastou, M., & Tzotzoli, P. (2018). Supporting mental health, well-being and study skills in Higher Education: An online intervention system. *International Journal of Mental Health Systems*, 12(1), 54. https://doi.org/10.1186/s13033-018-0233-z
- Basu, R., Sau, A., Saha, S., Mondal, S., Ghoshal, P., & Kundu, S. (2017). A study on knowledge, attitude, and practice regarding mental health illnesses in Amdanga block, West Bengal. *Indian Journal of Public Health*, 61(3), 169. https://doi.org/10.4103/ijph.IJPH_155_17
- Birkie, M., & Anbesaw, T. (2021). Knowledge, attitude, and associated factors towards mental illness among residents of Dessie town, northeast, Ethiopia, a cross-sectional study. *BMC Psychiatry*, 21(1), 614. https://doi.org/10.1186/s12888-021-03609-0
- Britt, T. W., Wilson, C. A., Sawhney, G., & Black, K. J. (2020). Perceived unit climate of support for mental health as a predictor of stigma, beliefs about treatment, and help-seeking behaviors among military personnel. *Psychological Services*, 17(2), 141–150. https://doi.org/10.1037/ser0000362
- Dalky, H. F., & Gharaibeh, A. (2019). Depression, anxiety, and stress among college students in Jordan and their need for mental health services. *Nursing Forum*, 54(2), 205–212. https://doi.org/10.1111/nuf.12316
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and Help Seeking for Mental Health Among College Students. *Medical Care Research and Review*, 66(5), 522–541. https://doi.org/10.1177/1077558709335173

- Hernández-Torrano, D., Ibrayeva, L., Sparks, J., Lim, N., Clementi, A., Almukhambetova, A., Nurtayev, Y., & Muratkyzy, A. (2020). Mental Health and Well-Being of University Students: A Bibliometric Mapping of the Literature. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.01226
- Huckins, J. F., daSilva, A. W., Wang, W., Hedlund, E., Rogers, C., Nepal, S. K., Wu, J., Obuchi, M., Murphy, E. I., Meyer, M. L., Wagner, D. D., Holtzheimer, P. E., & Campbell, A. T. (2020). Mental Health and Behavior of College Students During the Early Phases of the COVID-19 Pandemic: Longitudinal Smartphone and Ecological Momentary Assessment Study. *Journal of Medical Internet Research*, 22(6), e20185. https://doi.org/10.2196/20185
- Hyun, H. (2017). The Impact of Low Socioeconomic Status on the Mental Health and Self-Efficacy of College Students. 2017, 9.
- Lally, J., Samaniego, R. M., & Tully, J. (2019). Mental health legislation in the Philippines: Philippine Mental Health Act. *BJPsych International*, 16(03), 65–67. https://doi.org/10.1192/bji.2018.33
- LaMontagne, A. D., Shann, C., Lolicato, E., Newton, D., Owen, P. J., Tomyn, A. J., & Reavley, N. J. (2023). Mental health-related knowledge, attitudes and behaviours in a cross-sectional sample of australian university students: A comparison of domestic and international students. *BMC Public Health*, 23(1), 170. https://doi.org/10.1186/s12889-023-15123-x
- Morgan, B., & Simmons, L. (2021). A 'PERMA' Response to the Pandemic: An Online Positive Education Programme to Promote Well-being in University Students. *Frontiers in Education*, *6*, 642632. https://doi.org/10.3389/feduc.2021.642632
- Paler, E. A., Mary A. Milano, A., A. Patilano, R. M., A. Sacayan, K. R., O. Poblete, M.-L., B. Orias, J., & P. Madjus, L. M. (2022). Knowledge, skills, and attitude (ksa) of faculty members in recognizing mental health issues among college students. *The Malaysian Journal of Nursing*, 13(03), 65–70. https://doi.org/10.31674/mjn.2022.v13i03.010
- Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., & Wilens, T. (2015). College Students: Mental Health Problems and Treatment Considerations. Academic Psychiatry: The Journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry, 39(5), 503–511. https://doi.org/10.1007/s40596-014-0205-9
- Pescosolido, B. A. (2013). The Public Stigma of Mental Illness: What Do We Think; What Do We Know; What Can We Prove? *Journal of Health and Social Behavior*, 54(1), 1–21.
- Sawadogo, K. C. C., Lameyre, V., Gerard, D., Bruand, P., & Preux, P. (2020). Knowledge, attitudes and practices in mental health of health professionals at the end of their curriculum in Burkina Faso: A pilot study. *Nursing Open*, 7(2), 589–595. https://doi.org/10.1002/nop2.427
- Villarino, R. T. (2023). Effectiveness of an Online Health and Well-Being Program on Physical Activity, Nutrition, and Sleep in College Students. https://hehp.modares.ac.ir/article-5-65759-en.html
- Villarino, R. T. H., Villarino, M. L. F., Temblor, M. C. L., Bernard, P., & Plaisent, M. (2022a). Developing a health and well-being program for college students: An online intervention. *World Journal on Educational Technology: Current Issues*, 14(1), 64–78. https://doi.org/10.18844/wjet.v14i1.6638
- Villarino, R. T. H., Villarino, M. L. F., Temblor, M. C. L., Chabit, N. T., Arcay, C. A. L., Gimena, G. B., Bernard, P., & Plaisent, M. (2022b). Evaluating an online well-being program for college students during the COVID-19 pandemic. *Journal of Health Sciences*. https://doi.org/10.17532/jhsci.2022.1631
- Villarino, R. T., Villarino, M. L., Temblor, M. C., Bernard, P., & Plaisent, M. (2022c). Association between Physical Health and Well-being: A Quasi-experimental Study. 21(03), 7.
- Villarino, R. T., Villarino, M. L., Temblor, M. C., Bernard, P., & Plaisent, M. (2023). Correlating Demographics and Well-being among Rural College Students in the Philippines. *Nurse Media Journal of Nursing*, 13(1), 22–30. https://doi.org/10.14710/nmjn.v13i1.49036
- World Health Organization. (2020). *Doing What Matters in Times of Stress*. https://www.who.int/publications/i/item/9789240003927?gclid=CjwKCAjwov6hBhBsEiwAvrvN6Nhs6BD0Am1vJhtIoi WzsKUa0SyOMpIPo8JPvt98B0S1120f3uXe0RoCzdEQAvD_BwE
- Zahid Iqbal, M., Rathi, R., Prajapati, S., Zi Qing, M., Pheng, T., Wei Kee, H., Bahari, M., Rajan, S., Al-Saikhan, F., & Iqbal, M. (2021). Knowledge, attitude, and practice about mental health challenges among healthcare students of a private university. *Journal of Pharmacy And Bioallied Sciences*, 13(1), 136. https://doi.org/10.4103/jpbs.JPBS_297_20