

Gender-Based Mental Health Assessment of Students in a Selected Higher Academic Institution in the Philippines

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Abstract—This paper aims to investigate the state of mental health of the students at City College of Calamba in the Philippines regardless of their gender. Using a quantitative approach, four hundred eighty-seven (487) college students responded with the validated questionnaire known as the College Adjustment Scale Assessment tool which was acquired by the institution was utilized. With the average mean of 1.9255 which is interpreted as “Low Risk” means that majority of the students in the institution appear to be dealing with typically pleasant mental state. It further implies that the respondents do not have significant or worrisome levels of mental health issues on average regardless of their gender. While individual experiences may vary, this overall low-risk rating suggests that, as a group, these college students are coping rather well with the numerous pressures and challenges that frequently accompany the college experience. Their mental health looks to be stable, and they may not be experiencing severe anxiety, depression, or other mental health conditions at levels that would cause immediate worry.

Keywords—gender-based, mental health, students, higher education institutions

I. INTRODUCTION

There has been an increasing recognition of the importance of mental health, not just as an important component of total well-being, but also as a basic human right. Individuals' capacity to cope with life's problems, develop their potential, and constructively contribute to their communities is greatly influenced by their mental health. This understanding extends to the student body, where mental health has a substantial influence on academic and personal life. Mental health is a state of mental well-being that underpins decision-making, social interactions, and environmental impact. It enables people to manage life's stressors, recognize their strengths, study and work efficiently, and give back to their community.

Several studies [1, 2] conducted such as the World Health Organization (WHO), revealed that mental health issues are prevalent issue among college students worldwide. Shockingly, one in four students' worldwide experiences mental health problems. For instance, girls are more likely to experience depression and anxiety, while boys are more likely to experience substance use disorders and antisocial behaviors. In the Philippines [3], there is an increasing awareness of the significance of mental health. Despite this, a persistent stigma connects with the mental health issues that these college students find it difficult to seek help regarding this kind of problems. Several factors may contribute to

mental health issues. Gender is also a factor that can influence mental health. Similar to college students of Higher Education Institutions (HEIs) such as City College of Calamba (CCC). CCC strives to create a supportive atmosphere suitable for learning and overall growth. To attain this purpose, it is important to investigate the mental health challenges that its students face, taking into consideration gender variations in their experiences. Gender, being a social construct, has an impact on many elements of a person's life, including their mental health. Among male, female, and non-binary students, social expectations, cultural norms, and personal identities can all contribute to diverse patterns of mental health difficulties. Understanding gender variations in mental health concerns is critical for several reasons. First, it aids in the identification of certain risk factors and vulnerabilities that may be more frequent in various gender groups. Second, it allows for the creation of specific preventative and intervention programs to meet these distinct difficulties. Third, acknowledging the variety of the student population aids in the development of inclusive and supportive mental health services that meet the needs of all students.

This paper intends to provide a complete knowledge of the mental health difficulties experienced by different gender groups within the CCC student community. This study will help to develop gender-specific methods and treatments to enhance mental health and establish a supportive atmosphere that meets the different needs of all students. CCC may make proactive efforts toward developing a more inclusive and supportive environment that supports the overall well-being of its students by conducting a gender-based evaluation of mental health concerns among HEIs' students. The major goal of this study is to investigate the gender-based evaluation of mental health among CCC students. The study specifically seeks to answer the following research questions: 1) What is the state of the mental health of the students at CCC in terms of Anxiety (AN), Depression (DP); Suicidal Ideation (SI); Substance Abuse (SA); Self-Esteem Problems (SE); Interpersonal Problems (IP); Family Problems (FP); Academic Problems (AP), and Career Problems (CP), and 2) Is there a significant difference in the mental health of the students at CCC regarding their gender?

II. RELATED WORK

Academic institutions across the globe have witnessed a substantial surge in the prevalence of mental health concerns

among their student bodies in recent times. Consequently, college campuses are frequently confronted with treatment demands that surpass the capacity of available resources. A total of six prevalent DSM-IV mental disorders, identified at the 12-month mark and manifesting symptoms during early to middle adolescence, were assessed for. Older age, female gender, deceased unmarried parents, lack of religious affiliation, non-heterosexual orientation and behavior, low secondary school ranking, and extrinsic motivation for college attendance were the primary factors contributing to positive screening results.

An increasing percentage of graduate and college students are confronted with elevated levels of stress, which has detrimental impacts on their mental, scholastic, and physical welfare. Cognitive-behavioral therapy, coping skills interventions, and social support interventions were found to be more effective in reducing perceived stress among students, whereas mindfulness-based stress reduction, relaxation training, and psychoeducation demonstrated greater efficacy in diminishing anxiety.

The study by Wildey *et al.* [4] examined disparities in the utilization of services, support, and mental health issues among students according to their academic year, gender, and race/ethnicity. In contrast to males, female participants and those in their second and later years disclosed a greater prevalence of mental health concerns, adverse effects of the pandemic, and increased utilization of services. Several challenges were identified in relation to treatment, including financial constraints, limited knowledge regarding available resources, and inadequate university communication regarding services. It may be necessary for universities to enhance their level of communication with students and tailor their services to better meet their specific needs.

The mental health of male and female senior secondary school pupils from the hilly region of Uttarakhand was compared by Kumar and Yadav [5]. According to their research, the average score of male pupils was higher than that of female students. According to Vuelas-Olmos, Sanchez-Vidaña, and Cortes-Alvares [6], university students are particularly vulnerable to mental health concerns, particularly in the midst of the pandemic. The researchers examined the correlation between physical activity, mental health, sleep quality, and aggression in college students.

Sagar-Ouriaghli *et al.* [7] underscored the disparity in the propensity of men to seek help for mental health concerns when compared to women. Five distinct themes were identified in their research through the analysis of focus group discussions. 1) safeguarding male susceptibility; 2) presenting a narrative associated with masculinity regarding seeking assistance; 3) variations in the design of interventions; 4) challenges in discerning the appropriate moment and manner to seek assistance; and 5) approaches to respectfully interacting with male students.

The escalating prevalence [8] of mental health concerns among collegiate populations, in summary, poses a substantial obstacle for governmental bodies and institutions of higher learning.

The existence of gender disparities [9] in mental health becomes apparent during childhood and adolescence, underscoring the necessity for specialized mental health services for children and adolescents. There are

gender-specific therapies available for the mental health of children and adolescents; however, their efficacy remains uncertain. Randomized controlled trials yielded inconclusive causal evidence, underscoring the scientific community's imperative for conducting more comprehensive experiments. Nevertheless, offering gender-specific mental health services could potentially serve as a viable approach to tackle these needs.

According to a study by Stentiford, Koutsouris, and Allan [10], academic pressures and media and academic discourse revolve around the critical issues of academic achievement and the performance expectations that are imposed on women. They discovered that mental illness and anxiety are more likely to develop when circumstances are "imbalanced" and experienced to their maximum capacity. According to a study conducted by Woodford *et al.* [11], it was discovered that psychological distress among college students who identify as sexual minorities (LGBQ+) could result from heterosexist discrimination. Their research underscores the criticality of implementing institutional safeguards to prevent prejudice against LGBTQ+ students on college campuses, as well as the value of examining particular structural initiatives.

The mental well-being of students is declining [12], as an increasing proportion of students are deciding to pursue mental health interventions before enrolling in college. Academic establishments are reevaluating crisis management protocols, implementing group therapy, peer counseling, and telehealth, and enhancing the preparedness of faculty and staff to recognize and assist students who require assistance. Additionally, numerous institutions of higher education (HEIs) are striving to integrate a more comprehensive health culture into their day-to-day activities, regulations, and protocols.

Higher education has elevated student mental health to an absolute priority, as colleges and universities struggle to address the problems caused by the precipitous increase in students reporting distress and requesting assistance. In order to lend coherence to this extensive corpus of knowledge, Abelson, Lipson, and Eisenberg [13] undertook an exhaustive examination of the policies, practices, programs, and services that influence the mental health of students.

III. METHODOLOGY

A total of 487 bonafide students of CCC served as the respondents. These students were drawn from various academic levels, ranging from first-year to fourth-year level, and represented diverse gender identities. The students who took part of the study belonged to different academic programs including Bachelor of Science in Accountancy, Bachelor of Science in Accounting Information System, Bachelor of Science in Psychology, Bachelor of Science in Information Technology, Bachelor of Science in Computer Science, and Bachelor of Secondary Education majors in English, Mathematics, Science, and Elementary Education.

Using the quantitative research, a standardized psychological assessment tool acquired by the institution through the supervision of the Guidance, Counseling, Testing, and Career Development Office was employed in this paper. College Adjustment Scales (CAS) [14] is a standardized psychological diagnostic measure used by counselors for

college students by professionals. The CAS includes nine scales measuring psychological well-being and adjustment such as Anxiety, Depression, Suicidal Ideation, Substance Abuse, Self-Esteem Problems, Interpersonal Problems, Family Problems, Academic Problems, and Career Problems. The responses were evaluated using a 4-point scale ranging from 1.00 to 4.00. Scores from 1:00 to 1.75 were categorized as “Very Low Risk”, 1.76 to 2.50 were categorized as “Low Risk”, 2.56 to 3.25 associated with “High Risk”, and 3.26 to 4.00 labeled as “Very High Risk”. CAS enabled researchers to systematically analyze and quantify many psychological characteristics that potentially affect CCC students’ well-being and adjustment, eventually providing a better understanding of their mental health and transition to college life.

IV. RESULTS AND DISCUSSION

In terms of the distribution of 487 respondents, there are 294 females, 180 men, and 13 LGBTQ (Lesbian, Gay, Bisexual, Transgender, Queer/Questioning) members in this group. This dataset emphasizes the necessity of inclusion and acceptance of the whole spectrum of gender and sexual orientation. The increased female representation shows a gender imbalance, which might have repercussions in a variety of scenarios. The presence of LGBTQ people emphasizes the need of providing support and inclusiveness to people of all sexual orientations. It is critical to collect and analyze such data in order to make educated decisions, build egalitarian settings, and respect individual identities and experiences.

Table 1. CAS results among female respondents

CAS Components	Mean	Verbal Description
Academic Problems	2.00	Low Risk
Anxiety	2.37	Low Risk
Interpersonal Problems	2.07	Low Risk
Depression	2.11	Low Risk
Career Problems	2.06	Low Risk
Suicidal Ideation	1.52	Very Low Risk
Substance Abuse	1.10	Very Low Risk
Self-Esteem Problems	2.28	Low Risk
Family Problems	1.93	Low Risk
Total	1.94	Low Risk

Table 1 shows that the low-risk group includes issues related to academics, anxiety, relationships, depression, careers, and self-esteem, with mean scores ranging from 2.00 to 2.37. With a mean score of 1.93, family difficulties likewise show a low-risk level, albeit significantly lower. With typical scores of 1.10 and 1.52, respectively, it is noteworthy that drug abuse and suicidal thoughts exhibit extremely low risk levels. These results imply that the majority of the female students of CCC have a positive mental health profile with minimal indications of severe issues such as suicidal ideation and substance abuse. However, individual cases among female students may still need attention and assistance, and continuous observation and intervention activities are essential to preserve the general well-being of students.

Table 2. CAS results among male respondents

CAS Components	Mean	Verbal Description
Academic Problems	2.02	Low Risk
Anxiety	2.08	Low Risk
Interpersonal Problems	1.96	Low Risk
Depression	1.95	Low Risk
Career Problems	1.99	Low Risk
Suicidal Ideation	1.48	Very Low Risk
Substance Abuse	1.18	Very Low Risk
Self-Esteem Problems	2.23	Low Risk
Family Problems	1.88	Low Risk
Total	1.86	Low Risk

Table 2 shows that the “Low Risk” includes issues related to academics, anxiety, relationships, depression, careers, self-esteem, and families; typical scores in this area range from 1.95 to 2.23. Suicidal thoughts and substance abuse are much less common, with mean scores in the “Very Low Risk” indicating less concern in these areas. Overall, the findings revealed that the majority of the male students of the institution show adequate mental health functioning in all of the measured categories. According to these statistics, the student population under study likely has relatively low levels of mental health difficulties overall. However, to guarantee that the male students’ welfare continues to be a top priority, it is necessary to monitor and solve these components continuously.

Table 3. CAS results among LGBTQ respondents

CAS Components	Mean	Verbal Description
Academic Problems	2.03	Low Risk
Anxiety	2.54	High Risk
Interpersonal Problems	2.28	Low Risk
Depression	2.20	Low Risk
Career Problems	2.26	Low Risk
Suicidal Ideation	1.95	Low Risk
Substance Abuse	1.33	Very Low Risk
Self-Esteem Problems	2.38	Low Risk
Family Problems	2.09	Low Risk
Total	2.12	Low Risk

With typical scores ranging from 2.03 to 2.38 as shown in Table 3, academic difficulties, interpersonal issues, depression, professional troubles, suicidal ideation, self-esteem problems, and family problems are all considered low-risk. With a mean score of 2.54, anxiety, on the other hand, stands out as a high-risk area that may require more attention and intervention. With a mean score of 1.33, which indicates extremely low risk, substance abuse comes out as the component with the lowest risk among those evaluated. The overall mean score of 2.12 supports the idea that they fall into the low-risk category collectively. Findings revealed that although most LGBTQ students are managing various aspects of their lives fairly well, a small percentage is facing increased anxiety. This underscores the significance of providing focused support and resources to address mental health issues among the student body.

Table 4. Gender responses' mean

CAS Components	Average Mean	Verbal Description
Academic Problems	2.02	Low Risk
Anxiety	2.33	Low Risk
Interpersonal Problems	2.10	Low Risk
Depression	2.09	Low Risk
Career Problems	2.10	Low Risk
Suicidal Ideation	1.65	Very Low Risk
Substance Abuse	1.20	Very Low Risk
Self-Esteem Problems	2.29	Low Risk
Family Problems	1.97	Low Risk
Total	1.97	Low Risk

The results indicate that, on average, students of the institution regardless of their gender are not facing considerable obstacles in the mentioned areas, with mean scores ranging from 2.02 to 2.33 as shown in Table 4. Moreover, the students' mean scores for substance abuse and suicidal thoughts are noticeably low, putting them in the "very low risk" category and suggesting a low prevalence of these worrisome conditions. Family difficulties have a little lower mean score than other domains, indicating a somewhat heightened level of concern, yet still within a tolerable range, even though they are still classified as low risk. Overall, the findings present a somewhat optimistic picture of the mental health and general well-being of the student body that is the subject of the study, with few signs of high-risk or extremely high-risk levels in any of the components that are being evaluated.

Table 5. Kruskal Wallis results of significant difference

	χ^2	df	p	ϵ^2
B	4.2786	2	0.1177356871156960	0.16456

Table 5 shows the non-significant *p*-value (*p* = 0.1177) which indicates that there is insufficient evidence to reject the null hypothesis, which states that there are no significant variations in mental health between the given gender categories. This finding suggests that, based on the data obtained, male, female, and LGBTQ students at CCC had similar mental health outcomes. The effect size (ϵ^2) of 0.16456 suggests a moderate connection between gender identity and mental health disparities. This shows that changes in gender identification account for roughly 16.46% of the variance in mental health scores, which sheds light on the practical importance of the reported effects. It is crucial to highlight that, while the *p*-value does not meet conventional criteria of significance (usually set at 0.05), researchers should interpret these findings in light of their unique study aims, sample size, and the findings' practical importance. The non-significant *p*-value might be affected by variables such as sample variability or the necessity for a bigger sample size to identify tiny but possibly substantial changes. Hence, based on the findings, there is no significant difference in mental health between male, female, and LGBTQ students at CCC.

V. CONCLUSION

The predominance of low-risk and very low-risk categories across several areas is a favorable sign of the

questioned persons' overall well-being. It is encouraging to see that, on average, individuals are successfully navigating the rigors of college life, with low levels of anxiety, sadness, and interpersonal conflict. The low likelihood of substance abuse among students shows the efficacy of existing preventative measures or support networks. It is crucial, however, to stay sensitive to the diverse experiences of individuals within these broad categories. Even among low-risk categories, there may be students who have unique obstacles such as academic concerns, self-esteem problems, and interpersonal problems that need individualized assistance. For academic concerns, one-on-one consultation/mentoring shall be done to assess the students learning on certain subjects. Peer tutoring would be an effective approach to enhance the student's learning. Additionally, students having difficulty mingling with other students, are suggested to be more explorative and active in joining various organizations. It is recommended to conduct seminar on personality development, and the presence of peer support group that will serve as their peer buddies. Students with low risk are advised to visit the guidance and counseling office to further assist them if the needs arise. The findings underscore the continuous need for readily available mental health resources and support services on college campuses, ensuring that all students have the skills and support they need to succeed during their academic journey. The findings revealed that there is no significant difference in mental health between male, female, and LGBTQ students at CCC, future researchers may want to investigate other aspects or perform more research to acquire a more detailed picture of mental health in these specific demographic groupings.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

The authors play a significant role in the completion of this paper. R. G. Almonte and M. Wania conducted the research and analyzed the data; M. Montano, E. Reyes, and N. Armario wrote the paper; P. Salili encoded the data for analysis and formatted the paper based on the template; all authors had approved the final version.

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