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**TOWARD AN ONLINE MENTAL HEALTH LITERACY MODEL**

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**Acceptance Page:**

This paper prepared by **ROYANNI MIEL M. HONTUCAN** titled **TOWARD AN ONLINE MENTAL HEALTH LITERACY MODEL** is hereby accepted by the Faculty of Information and Communication Studies, U.P. Open University, in partial fulfillment of the requirements for the degree Program.

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## Biographical Sketch

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From 2017 to 2019, she has taught Media and Information Literacy to senior high school students in SU. At the same time, she had been a feature writer in the culture and lifestyle section for the regional newspaper *Island News*.

Creative fiction is her lifelong passion and pursuit. She had written for the prose and poem anthologies *Whispers of Hope*, *Potion for the Passionate*, and *When Wishes Come True* that are published by Ukiyoto Publishing in 2021.

She believes that coffee is the elixir of life and that life is meant to be lived in constant growth, well-being, and compassion for others founded by the teachings of Christ.

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## **Dedication**

I dedicate this Master's thesis to my grandparents, Mrs. Amparo Panolin-Millares and Mr. Rodrigo Millares Sr. and Engr. Andres Hontucan and Mrs. Socorro Manaban-Hontucan.

I owe my life from their lives' work and love that have sustained me.

## Table of Contents

Title Page	i
University Permission Page	ii
Acceptance Page	iii
Biographical Sketch	iv
Acknowledgement	v
Dedication	viii
Table of Contents	ix
List of Tables	x
ABSTRACT	xiii
CHAPTER I: INTRODUCTION	2
Rationale	2
Statement of the Problem	6
Objectives	8
Significance of the Study	8
Scope and Limitations of the Study	10
CHAPTER II: REVIEW OF RELATED LITERATURE	11
Theoretical Framework	11
Conceptual Framework	25
Operational Framework	29
CHAPTER III: METHODOLOGY	32
Research Design	32
Locale of the Study	33
Respondents	34
Research instrument	38
Sampling Procedure	38
Data collection	42
Data interpretation and presentation	44
Ethical Consideration	45

CHAPTER IV: RESULTS AND DISCUSSIONS	48
CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS	76
Summary	76
Conclusions	79
Recommendations	81
REFERENCES	82
ANNEXES	xviii

### **List of Tables**

Table 1.Operational definitions of MHL attributes	12
Table 2.Population of enrolled Grade 12 Students in SUSH (2021–2022)	35
Table 3.Authorities in the development and implementation of the SUSH Mental Health Communication Network (SY 2021–2022)	37
Table 4.Proportion Percentage Calculation	40
Table 5.Margin of Error Equation	41
Table 6.Discussion of the SUSH Mental Health Care	68
Table 7.Perceptions of the feasibility of the Mental Health Communication Network in SUSH	70
Table 8.Support of the Experts of the Mental Health Communication Network in SUSH	71
Table 9.Perceived challenges of the Mental Health Communication Network in SUSH	73
Table 10.Suggestions for the development and implementation of the Mental Health Communication Network in SUSH	75

### **List of Figures**

Conceptual Framework	27
Operational Framework	29

## **List of Graphs**

Graph 1. Profile-Biological Gender	48
Graph 2. Profile-Age	49
Graph 3. Profile-Strand	49
Graph 4. Mental Health Care Interest	50
Graph 5. Importance of Mental Health Care	50
Graph 6. Reasons for Mental Health Care	51
Graph 7. Mental Health Care-Mobile Application	52
Graph 8. Mental Health Care-Literacy	53
Graph 9. Mental Health Network-Language	54
Graph 10. Mental Health Network-Content	55
Graph 11. Mental Health Care Network-Features	56
Graph 12. Mental Health Care Network-Content Arrangement	57
Graph 13. End-User Motivations	58
Graph 14. Network Data-Privacy	59
Graph 15. Mental Health Network Intervention	59
Graph 16. Network Communication Platforms	60
Graph 17. Intervention Protocol	61
Graph 18. Mental Health Network-Intervention Features	62
Graph 19. Virtual Community as Social Support System	62
Graph 20. Features for a Virtual Community	63
Graph 21. Virtual Community Guidelines	64
Graph 22. Mental Health-Network Purpose	65
Graph 23. Possible Further Feasibility Studies for Mental Health Networks	65
Graph 24. Possible Further Feasibility Studies for Mental Health Networks	67

## **List of Photographs**

Mental Health Content Arrangement	xxv
Photograph 1. In Separate pods	xxv

Photograph 2. In links	xxv
Photograph 3. In drop-down menus	xxv
Silliman Online University Learning (SOUL) Interface	xxxix
Photograph 4.mySOUL Homepage interface	xxxix
Photograph 5.mySOUL Guidance Testing Division Interface.	xxxix
Photograph 6.mySOUL Mental health content interface	xL
Photograph 7.mySOUL Mental health chat support interface	xL

## **Abstract**

Mental Health Literacy (MHL) in the Philippines is yet to be developed because of the stigma surrounding mental health. This research narrows down the study of mental health perception and needs among adolescents because they're the ones vulnerable to experiencing mental health disorders but are most willing to seek treatment. The study based the development of an online MHL model on the comprehensive methodology of the Health Belief Model (HBM) centered on the collective needs of the respondents to improve MHL and encourage professional intervention. Through an exploratory-descriptive research design, data was collected through student survey and key informants interviews were conducted with concerned administration personnel. Results of the study show that most students perceived an online network for mental health could aid in their individual development of MHL and that they are most willing to seek intervention with the university's mental health experts based on certain conditions surrounding their relevant needs. The results show the collective responses of the respondents regarding mental health issues, perceptions, and the features that could be integrated in the development of a mental health network. Findings also reveal that the administrative personnel recognized the significance of the network and signified their support for its implementation.

**Keywords:** Mental health; mental health literacy; mental health network; mental health communication

## Chapter I

### INTRODUCTION

#### Background of the Study

According to Karaffa and Hancock (2019), adolescents are particularly vulnerable to experiencing mental health disorders, but they are the ones most willing to seek treatment for issues regarding substance abuse, traumatic experiences, and anxiety (pp.459–469).<sup>1</sup>

It is significant to improve Mental Health Literacy (MHL) to aid adolescents in an individual-based mental health care management. Jorm et al. (2005) refers to MHL as the knowledge and attitudes regarding mental health that aid in recognition, management and prevention of mental health issues (pp.36-41).<sup>2</sup>

Mental health care should be prioritized especially that senior high school students are loaded with academic subjects. Because of the pressure to excel in their studies, senior high school students are vulnerable to underperforming in their academics and be exhausted, resulting in abnormal sleeping patterns and unhealthy eating habits. This unhealthy lifestyle contributes to the decline of a student's mental health that would possibly affect their physical health.

Aside from academic pressure, there are private unresolved issues that students are facing such as parental separation, childhood trauma, and other unresolved emotional issues. If left unmanaged, these issues would lead young

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<sup>1</sup>Karaffa, K.M., & Hancock T.S. (2019). Mental health stigma and veterinary medical students' attitudes toward seeking professional psychological help. *Journal of Veterinary and Medical Education*, Vol. 46, No. 4, pp.459-469. DOI: <https://doi.org/10.3138/jvme.1217-185r>

<sup>2</sup>Jorm, A.F., Christensen, H., Griffiths, K.M. (2005). The public's ability to recognize mental disorders and their beliefs about treatment: changes in Australia over 8 years. *Aust. N. Z. J. Psychiatry*, 40, 36–41. <https://onlinelibrary.wiley.com/doi/abs/10.5694/j.1326-5377.1997.tb140071.x>

people to act out in unhealthy ways such as abnormal sleeping patterns, binge-eating, substance abuse, and even harming oneself.

Although there are guidance offices in every college/department that provide mental health care support to students, faculty, and staff, it has been observed that senior high school students are hesitant in visiting the guidance office unless referred for their misbehavior.

This prompted the researcher to conduct a research on a development of a private, convenient, and informative mental health network based on the perceived mental health issues, needs, and developments of the majority of senior high school students.

### **Stigma on mental health care**

Visiting the guidance office has not been a habit among students in the Philippines largely because of stigma.

Tuliao (2014) stated in a study that public stigma against seeking help from mental illness has contributed to the discouragement of Filipinos in seeking professional assistance because Filipinos might be threatened in losing their social integrity and standing when they seek for help for their mental health issues. He also stated that most Filipinos are discouraged to seek for professional assistance and would rather seek comfort with their families and friends (pp.459–469).<sup>3</sup>

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<sup>3</sup>Tuliao, A.P. (2014). Mental health help seeking among Filipinos: a review of the literature. *Asia Pacific Journal of Counselling and Psychotherapy*, Vol. 5, No. 2, pp.124-136. DOI: <https://doi.org/10.1080/21507686.2014.913641>

Despite the stigma against mental health, a study revealed that greater mental health literacy would prompt people to seek formal help from professionals and informal help from family and friends. (Staiger et al., 2017, p.39)<sup>4</sup>

### **Mental health network in mySOUL**

The study is conducted in Silliman University because there is an opportunity to develop and integrate a network within its existing Moodle system, the Silliman Online University Learning (mySOUL).

mySoul is the official Learning Management System (LMS) of the university and an all-in-one web-based teaching and learning platform where asynchronous activities could be conducted.

Aside from mental health care literacy, the students are provided with an accessible communication platform with their current guidance counselor through the network. The platform is designed according to the features of social media applications for a direct message such as Facebook's Messenger.

Real-Time Communication is the model type of modern electronic communication with the use of any telecommunications service between a sender and a receiver without much delay (Vonage Staff, n.d.).<sup>5</sup>

The internet connection in using the communication network is accessible to students because SU has installed campus-wide internet connection with 30 mbps bandwidth at over 45 areas where students, faculty, staff, and guests can access the

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<sup>4</sup>Staiger, T., Waldmann, T., Rüschi, N., & Krumm, S. (2017). Barriers and facilitators of help-seeking among unemployed persons with mental health problems: a qualitative study. *BIOMED CENTRAL Health Services Research*, Vol. 17, No. 1, p.39. DOI: <https://doi.org/10.1186/s12913-017-1997-6>

<sup>5</sup>Vonage Staff (n.d.). *What is Real-Time Communications?* Vonage. <https://www.vonage.com.ph/resources/articles/real-time-communications/>

internet with their mobile phones and other gadgets (Internet Access Made Easy in 45 Wi-Fi Areas on Campus, 2013).<sup>6</sup>

With the convergence of mental health experts, institutional administrators, and information and community technology (ICT) specialists of SOUL, a mental health care network for senior high school in SU is feasible.

### **Students' health during COVID-19**

If students' mental health is already challenged during normal times, it even got worsen during the onset of the COVID-19 pandemic.

Students' mental health has deteriorated during the COVID-19 pandemic because of the inability to cope with online classes or modules that are alternative methodologies to face-to-face classes since direct contact could speed the spread of the virus. Aside from the challenges with the new educational methodology, exhaustion from answering modules with the lack of social and direct support from friends, increased screen time, and a bleak outlook of the pandemic has resulted to disrupted sleeping patterns, stress, depression, and even suicidal thoughts. Dr. Belle Erika R. Nubla-Gestuvo, head of outpatient services at The Medical City's Department of Psychiatry, stated that to manage these mental health challenges, it is necessary to learn how to develop resilience and healthy coping strategies (Lacsamana, 2021).<sup>7</sup>

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<sup>6</sup>Internet Access Made Easy in 45 Wi-Fi Areas on Campus (2013, June 16).Silliman University.<https://su.edu.ph/888-internet-access-made-easy-in-45-wi-fi-areas-on-campus/>

<sup>7</sup>Lacsamana, B. (2021, July 28). Filipino teens languish as pandemic drags on. *BusinessWorld*. DOI: <https://doi.org/https://www.bworldonline.com/health/2021/07/28/385092/filipino-teens-languish-as-pandemic-drags-on/>

There are no current existing mental health networks on mental health literacy for the senior high school students in the locale of the study, so the study aimed in the development of a mental health communication network that is suited to the needs of the senior high school students.

This Mental Health Communication Network is named “2Ik2Me” as a creative shortened name derived from the conversational sentence “talk to me” as a comforting and friendly approach to end-users.

2Ik2Me is designed as a private, accessible, and safe space based on the needs of senior high school students in Silliman University (SU). A mental health communication network is a needed intervention for guiding students in taking care of their mental health through educational resources such as articles, videos, and journal-related activities. It also provides a virtual community support for interaction.

### **Statement of the Problem**

As a response to the mental health concerns amid the COVID-19 pandemic, e-counseling platforms are created in SOUL as a virtual support system to provide services for mental health well-being.

There is still a need to improve it in terms of providing mental health literacy and mental health care. In this regard, this study provides a design for a mental health communication network based on the needs of the mental health care of the end-users, the senior high school students in the institution.

Mental health care has not been prioritized among students despite it being significant especially in areas such as stress management, anger management, depression, anxiety, and therapy for dealing with parental separation and other

familial issues. Aside from a low literacy rate of mental health care, attitudes toward help-seeking were fully mediated by stigma (Kim et al., 2020).<sup>8</sup>

Mental health literacy could be improved with information drives and early intervention with mental health experts (Spence & Donovan, 2002).<sup>9</sup> Informative drives could also mitigate stigma surrounding mental health care because when people are better educated about mental health, then they develop empathy toward people seeking help for mental health conditions (Brooks et al., 2019).<sup>10</sup>

This network could be feasible when designed into an accessible mobile application that provides mental health resources and communication with a mental health expert through a private communication platform.

In this regard, the following are the questions to be answered:

1. How do senior high school respondents perceive the significance of mental health care literacy? Further, what are their perceived purposes and motivations in using a mental health communication network?
2. What are the top 10 mental health issues that the senior high respondents find relevant?

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<sup>8</sup>Kim E.J., Yu, J.H., & Kim E.Y. (2020). Pathways linking mental health literacy to professional help-seeking intentions in Korean college students. *Journal of Psychiatric and Mental Health Nursing*, Vol. 27, No. 4, pp.393-405. DOI: <https://doi.org/10.1111/jpm.12593>

<sup>9</sup>Spence, S. & Donovan, C. (2002). Preventing depression in adolescence: short term results from the problem solving for life program. *International Perspectives on Child and Adolescent Mental Health*, Vol. 2, pp.189-212. DOI: [https://doi.org/10.1016/S1874-5911\(02\)80008-2](https://doi.org/10.1016/S1874-5911(02)80008-2)

<sup>10</sup>Brooks, H., Irmansyah, I., & Lovell, K. (2019). Improving mental health literacy among young people aged 11–15 years in Java, Indonesia: co-development and feasibility testing of a culturally-appropriate, user-centred resource (IMPeTUs)—a study protocol. *BIOMED CENTRAL Health Services Research*, Vol. 19, p.484. <https://doi.org/10.1186/s12913-019-4328-2>

3. What are the respondents' preferred features, language, security features, and

multimedia types, tools, and arrangements for the mental health communication network?

4. How will the communication system between the guidance office and the senior

high respondents be designed?

5. What are the attitude and the preferences of the senior high respondents toward a

Virtual Community Support? 6. How will the authorities in the university perceive,

support, develop, and implement the mental health communication network?

### **Objectives of the Study**

The study aims to provide a design for the development and implementation of a mental health communication network based on the needs of senior high school students. When this network is developed, it aims to promote mental health literacy and mental health expert intervention.

### **Significance of the Study**

The study provides a design for the development and implementation of a mental health communication network based on the needs of senior high school students. When this network is developed, it aims to promote mental health literacy

and mental health expert intervention. The network is motivated in improving the current perception of mental health care among senior high school students in SU.

In this regard, the following sectors that are most likely to benefit from the study are as follows:

1. **Senior high school students:** The study concentrates on the mental health care needs of senior high school students as the target demographic. They are the ones most likely to experience mental health problems due to their vulnerability to anxiety, to substance abuse, and to personal challenges with academics or with their families. Through the network, they can gain reliable resources for mental health care that can guide them in navigating mental health challenges. The network also provides a communication platform where they could correspond with their guidance counselor.
2. **Mental health professionals:** This sector includes clinical psychologists, psychiatrists, and related field specialists from whom people could seek formal help. This study could significantly improve the perception of mental health professionals in assessing current mental health challenges in their respective domains. This communication network provides a foundation for mental health specialists and ICT professionals to collaborate in developing further mental health networks for specific groups.
3. **Guidance counselors:** Guidance counselors are trained in providing mental health care in academic institutions. They could benefit from the study as being the direct mental health professionals who can cater to the needs of the students who have contacted them through the communication network.

4. **ICT specialists:** This study is a foundation in conducting further studies that explore the feasibility of improving mental health literacy and mental health intervention through ICT.

5. **Parents:** Parents can benefit from the study since their children are provided with mental health care resources and mental health care support. On a case-to-case basis, the guidance counselor could request for conference and cooperation from them in improving their child's situation.

6. **Development communicators:** This study is a foundation for more research to be done in the field of developing effective communication strategies and communication platforms for promoting mental health care in the Philippines.

### **Scope and Limitations**

The study is the design for the development of an information and communication network for improving the mental health literacy and promoting mental health intervention in SU Senior High School in SU Dumaguete City, Negros Oriental. The study does not cover beyond the demographic.

The study concentrated on students who own mobile phones or any alternative gadget that could connect to the World Wide Web. In this regard, the study does not cover the needs of the end-users who do not own mobile phones because the network is reliant on the connectivity to the World Wide Web in hosting the resource and communication platform.



## Chapter II

### REVIEW OF RELATED LITERATURE

#### Theoretical framework

##### MHL Scale

Jorm et al. (2005) determined in a study that MHL consists of seven attributes: the ability to recognise specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes; knowledge of self-treatments; knowledge of professional help available; and attitudes that promote recognition and appropriate help-seeking (p.36-41).<sup>11</sup>

The study also stated that low level knowledge of MHL would disable individuals in identifying symptoms of common disorders such as depression. Because of this, there is a failure to endorse a patient to appropriate treatment with professionals.

In this study, the test items were based on manifesting the attributes focused on the improvement of mental health information and mental health intervention at an individual level.

For purposes of improving mental health information, the study focused on manifestation of these attributes: Knowledge of how to seek mental health information and Knowledge of self-treatments.

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<sup>11</sup>Jorm, A.F., Christensen, H., Griffiths, K.M. (2005). The public's ability to recognize mental disorders and their beliefs about treatment: changes in Australia over 8 years. *Aust. N. Z. J. Psychiatry*, 40, 36–41. <https://onlinelibrary.wiley.com/doi/abs/10.5694/j.1326-5377.1997.tb140071.x>

For purposes of encouraging professional intervention, the study focused on the manifestation of these attributes: Knowledge of professional help available and Attitudes that promote recognition and appropriate helpseeking.

Please see Table 1 for Operational definitions of MHL attributes

<b>Attribute</b>	<b>Operational definition</b>
Ability to recognise specific disorders	Ability to correctly identify features of a disorder, a specific disorder or category of disorder
Knowledge of how to seek mental health information	Knowledge of where to access information and capacity to do so
Knowledge of risk factors and causes	Knowledge of environmental, social, familial or biological factors that increase the risk of developing a mental illness
Knowledge of self-treatments	Knowledge of typical treatments recommended by mental health professionals and activities that an individual can conduct
Knowledge of professional help available	Knowledge of mental health professionals and the services they provide
Attitudes that promote recognition and appropriate helpseeking	Attitudes that impact on recognition of disorders and willingness to engage in help-seeking behaviour

Table 1. Operational definitions of MHL attributes

## Mental health state in the Philippines

Even before the pandemic, mental health issues have already been prevalent among Filipinos especially among the youth.

According to the Philippine World Health Organization Special Initiative for Mental Health, 3.6 million Filipinos suffer from one kind of mental, neurological, and substance use disorder (Department of Health, 2020).<sup>12</sup>

<sup>12</sup>Department of Health (2020, October 10). *Your Mind Matters: DOH Calls for Unified Response to Mental Health*. Department of Health Official Website: <https://doh.gov.ph/press-release/YOUR-MIND-MATTERS-DOH-CALLS-FOR-UNIFIED-RESPONSE-TO-MENTAL-HEALTH>

Dr. Cornelio Banaag Jr. Professor Emeritus, Child and Adolescent Psychiatry, University of the Philippines- Philippine General Hospital (UP-PGH), stated in a report that the WHO estimates 10 to 20 percent of children and adolescents are suffering from mental disorders that started at 14. These mental health challenges were not detected until it was too late and detrimental physical manifestations such as physically harming oneself has already occurred. He added that the risk of suicide is highest in ages 15 to 24 years old (Visco, 2021).<sup>13</sup>

Banaag mentioned that the visible impacts of mismanaged mental health issues among Filipinos could be seen in the elevated levels of stress and anxiety observed in constant worrying, changes in sleeping and eating habits, and changes in emotion (2021).

The DOH confirmed these current mental health challenges. According to a report by the DOH (2021), one of three COVID-19 patients in the Philippines was diagnosed with a mental health condition within six months of testing positive for COVID-19. Aside from the anxiety of acquiring the virus, the government-mandated protocols such as lockdowns to mitigate the spread of the pandemic has also affected mental health state of people especially those who already have existing mental health conditions.

In 2021, the DOH developed a mobile application named as The *Lusog-Isip* app, which means healthy minds in Filipino, to meet the mental health needs of Filipinos. The mobile app is available to the public and is used to access self-help and self-care resources for mental health care. Aside from the resources, the application also offers evidence-based tools and materials to the

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<sup>13</sup>Visco, R. (2021, October 13). Covid-19 related mental health issues growing among the youth. *Business Mirror*. DOI: <https://doi.org/businessmirror.com.ph/2021/10/13/covid-19-related-mental-health-issues-growing-among-the-youth/>

users in the form of workbooks, journaling, mood trackers, and etc (DOH Press Release, 2021).<sup>14</sup>

With the development of a mental health application for mental health resource in the national level, the study finds this as a progress in effectively integrating mental health care with ICT.

According to the evaluation report by the DOH, the pilot test of the *Lusog-Isip* app revealed that the users expressed of improved well-being and they have also developed certain coping strategies such as cognitive reappraisal and emotional expression. The app is also contextualized to the Filipino population with cultural themes.

### **On the stigmatization of mental health care**

The development of mental health literacy among Filipinos is significant in mitigating stigma. A study revealed that public stigma against seeking help from mental illness has contributed to the discouragement of Filipinos in seeking professional assistance because Filipinos might be threatened in losing their social integrity and standing when they seek for help. In the case of seeking treatment, most Filipinos are discouraged to seek professional assistance and would rather seek comfort with their families and friends (Tuliao, 2014, pp. 459–469).<sup>15</sup>

But the knowledge of families and friends should not be the source of mental health information especially if they are not mental health experts. Aside from this, the comfort of family and friends should not replace professional intervention.

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<sup>14</sup>Department of Health. (2021, December 2021). Mental Health on the Move in the Philippines – Meet the Lusog-Isip App. Department of Health Official Website. <https://www.unc-chs.com/news/mental-health-on-the-move-in-the-philippines-meet-the-lusog-isip-app/>

<sup>15</sup>Tuliao, A.P. (2014). Mental health help seeking among Filipinos: a review of the literature. *Asia Pacific Journal of Counselling and Psychotherapy*, Vol. 5, No. 2, pp.124-136. DOI: <https://doi.org/10.1080/21507686.2014.913641>

In a study conducted by Redaniel et al. (2011), there are less reported statistics of suicide cases in the Philippines than in any other country. The study claimed that there could be unreported cases of suicide to protect the family's reputation and the disgrace that the Catholic Church will associate the person with because most Catholic countries misclassify a likely case of suicide as injury of undetermined intent or accidents (p. 536).<sup>16</sup>

Because of the perceived stigma, most mental health patients go on with their lives undiagnosed because stigmatization has largely been caused by mental illiteracy that discouraged mental health patients to seek professional help.

Aside from stigma, mental health care is not categorized as a priority in many health care systems because it might be seen as an abstract condition that could tolerate the prolonged treatment. After all, signs are infrequently concrete. But even if mental health is measured with thought processes determining behavior, it could still affect the physical state of a person. A study correlating physical and mental health recommended that health policies aiming at changing physical and mental health need to consider not only the direct cross-effects but also the indirect cross-effects between mental health and physical health (Ohrnberger et al., 2017, pp.42–49).<sup>17</sup>

Physical signs of mental illness, when discovered, could already appear when the person with a mental condition has already resorted to self-inflicted harm such as marks from cuts and scars from an attempted suicide and drastic loss of weight. To

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<sup>16</sup>Redaniel, M.T., Lebanan-Dalida, M.A., & Gunnell, D. (2011). Suicide in the Philippines: time trend analysis (1974–2005) and literature review. *BIOMED CENTRAL Public Health*, Vol. 11, p.536. <https://doi.org/10.1186/1471-2458-11-536>

<sup>17</sup>Ohrnberger, J., Fichera, E., & Sutton, M. (2017). The relationship between physical and mental health: a mediation analysis. *Social Science & Medicine*, Vol. 195, pp.42–49. DOI: <https://doi.org/10.1016/j.socscimed.2017.11.008>

mitigate drastic consequences, mental health should be perceived not as a condition that is needed to be seen before treatment.

Mental health awareness and treatment could be improved with promotion, prevention, and early intervention strategies as it may have a great impact on people's well-being (Colizzi et al., 2020, p. 23). In this regard, public awareness of common mental health illnesses should be advocated especially since a study revealed that the direct effect of mental health literacy on attitudes toward help-seeking was fully mediated by stigma (Kim et al., 2020, pp. 393–405).<sup>18</sup>

Communicating about mental health has already seen improvements, as much as by developments in reporting, legislation, and technology. Despite these developments surrounding mental health treatment, the same issues involved remain essentially the same in implementing it successfully (Wynter & Smith, 2017, pp. 73–80).<sup>19</sup>

### **Health Belief Model (HBM) for effective health communication model**

The study aimed to provide a system based on the needs and preferences of the end-users. Since there are no current existing mental health networks for the senior high school students in the locale of the study, there are no related studies that the study could yield data for comparison and reference.

The study aids senior high school students in taking care of their mental health and managing mental health challenges through education.

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<sup>18</sup>Kim E.J., Yu, J.H., & Kim E.Y. (2020). Pathways linking mental health literacy to professional help-seeking intentions in Korean college students. *Journal of Psychiatric and Mental Health Nursing*, Vol. 27, No. 4, pp.393-405. DOI: <https://doi.org/10.1111/jpm.12593>

<sup>19</sup>Wynter, R., & Smith L. (2017). Introduction: historical contexts to communicating mental health. *Medical Humanities*, Vol. 43, No. 2, pp.73-80. DOI: <https://doi.org/10.1136/medhum-2016-011082>

Effective health education could be achieved through following the concepts of the Health Belief Model (HBM) developed by Hochbaum, Rosenstock, and Kegels in 1952.

The HBM is a model of predicting health-related behavior that considers belief patterns. The model evaluates a person's behavior according to three categories: *individual perceptions, modifying factors, and likelihood of action* (Rosenstock, 1974, pp.328-335).<sup>20</sup>

Developing the health communication strategies in the development of the mental health network has been based on the three categories of HBM.

In this study, the student respondents were asked about their perceived issues and attitudes regarding their mental health. Data on their personal needs (individual perceptions), preferences of the features to be integrated (modifying factors), and numerical scales measuring the willingness to learn, perform, and seek help (likelihood of action) were also gathered that will become the key features on the development of the network.

### **Youth and mental health care**

During the COVID-19 pandemic, mental health challenges worsened among Filipino youth. Banaag determined “uncertainty” and “isolation” as significant factors in the rise of mental health problems among adolescents. This is because there were substantial changes in their routines and with a lack of daily structure, it is challenging to cope with isolation (Visco, 2021).<sup>21</sup>

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<sup>20</sup>Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs*, Vol. 2, No.4, pp.328-335.

<sup>21</sup>Visco, R. (2021, October 13). Covid-19 related mental health issues growing among the youth. *Business Mirror*. DOI: <https://doi.org/businessmirror.com.ph/2021/10/13/covid-19-related-mental-health-issues-growing-among-the-youth/>

Banaag mentioned that physical manifestations of mental health problems result to changes in eating habits, difficulty in concentration, aggression, crying for help in social media, and multiple physical ailments without cause. He firmly stated that early intervention could reduce the severity of the illness and delay the manifestations of deeper mental health problems (2021).

In a recent report, the COVID-19 pandemic has still significantly affected the psychological and social well-being of many Filipinos especially among the youth. The anxiety of adolescents has worsened because they're still being deprived of face-to-face classes. This situation prolonged the feelings of anxiety, isolation, and uncertainty (de Vera, 2022).<sup>22</sup>

With these increased reports of mental health challenges, it is significant for the youth to be more literate with mental health care to manage mental health challenges. With greater mental health literacy, the youth would develop resilience and more effective coping strategies to manage their mental health.

As mentioned in a study by Staiger et al. (2019), it is not only within the young sector that greater mental health literacy was significantly associated with increased intentions and behaviors to seek help from health professionals (formal help) and family and friends (informal help). So it is significant to explore the possibilities of improving mental health literacy to facilitate formal as well as informal help-seeking (p. 39).<sup>23</sup>

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<sup>22</sup>de Vera, B. (2022, January 24). Youth, Women, Jobless worst hit by Anxiety. *Philippine Daily Inquirer*. DOI: <https://newsinfo.inquirer.net/1544053/youth-women-jobless-worst-hit-by-anxiety#ixzz7Q9gM3jXV>

<sup>23</sup>Staiger, T., Waldmann, T., Rüscher, N., &Krumm, S. (2017). Barriers and facilitators of help-seeking among unemployed persons with mental health problems: a qualitative study. *BIOMED CENTRAL Health Services Research*, Vol. 17, No. 1, p.39. DOI: <https://doi.org/10.1186/s12913-017-1997-6>

Well-organized information drives could prompt early diagnoses that will proceed with early intervention. In 2002, a program entitled Problem Solving for Life Program (PSFL) was created by Spence and Donovan (2002).<sup>24</sup> It is a universal program aimed at preventing adolescent depression. PSFL course is associated with increased social problem-solving ability and decreased depressive symptoms in both high- and low-risk intervention groups from pre- to post-intervention (Spence & Donovan, 2002, pp. 189–212).

Mental health literacy will improve understanding and empathy when it comes to people with mental health conditions. A study recommended that improving mental health literacy in children and young people, a core part of recent global health strategies, has the potential to address some of these challenges (Brooks et al., 2019, p. 484).<sup>25</sup>

Despite the opportunity in improving mental health literacy, stigmatization remains as the most significant cultural factor as a hindrance in developing mental health literacy. A study in Northern Iraq revealed that support from family and friends appeared to be critical in seeking treatment although lack of private space, insufficient staffing, and need for greater government support were also important issues (Nguyen et al., 2019, p. 75).<sup>26</sup>

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<sup>24</sup>Spence, S. & Donovan, C. (2002). Preventing depression in adolescence: short term results from the problem solving for life program. *International Perspectives on Child and Adolescent Mental Health*, Vol. 2, pp.189-212. DOI: [https://doi.org/10.1016/S1874-5911\(02\)80008-2](https://doi.org/10.1016/S1874-5911(02)80008-2)

<sup>25</sup>Brooks, H., Irmansyah, I., & Lovell, K. (2019). Improving mental health literacy among young people aged 11–15 years in Java, Indonesia: co-development and feasibility testing of a culturally-appropriate, user-centred resource (IMPeTUs)—a study protocol. *BIOMED CENTRAL Health Services Research*, Vol. 19, p.484. <https://doi.org/10.1186/s12913-019-4328-2>

<sup>26</sup>Nguyen, A.J., Rykiel, N., & Murray, L. (2019). Stakeholder perspectives on integration of mental health services into primary care: a mixed methods study in Northern Iraq. *International Journal of Mental Health Systems*, Vol. 13, p.75. <https://doi.org/10.1186/s13033-019-0330-7>

Stigmatization is gradually being brought to awareness to improve the culture surrounding mental health conditions through certain movements that have been started in universities.

### **ICT Convergence with Mental Health**

Information drive is critical in shifting cultural mindsets regarding mental health. Since ICT tools are much more accessible this day, creating information strategies on mental health care is highly feasible.

A study suggested that incorporating mobile technology in mental health could be feasible in developing countries such as the Philippines even if the technology is still being researched and innovated (Umali et al., 2016).<sup>27</sup>

Despite the advancements of technology, the mental health field is still dependent on traditional assessment tools in gathering information, but with mobile technology, gathering information becomes more proactive especially when it comes to monitoring.

In this regard, mental health could be integrated with ICT tools. This study will explore the feasibility of a mental health care network since most people already owned smartphones and are frequently using it.

Sean Gowran, Country Manager of Ericsson Philippines and Pacific Islands, said that there was an increase of smartphone consumers due to the affordability and advancements in technology by 2016. According to the report, it is the youth

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<sup>27</sup>Umali, E., McCool, J., & Whittaker, R. (2016). Possibilities and expectation for mHealth in the Pacific Islands: insights from key informants. *The Journal of Medical Internet Research MhealthUhealth*, Vol. 4, No. 1. DOI: <https://doi.org/10.2196/mhealth.4626>

who are frequently using their smartphones for social media and instant messaging apps (Jiao, 2016).<sup>28</sup>

There is a study proposing extending mobile technology to psychological health. A study by Cheng et al. (2016) proposed that initial clinical assessment could highly be developed with the use of mobile technology particularly in detecting mood disturbances such as depression by analyzing daily activities such as language use in communication that could be associated with depressive symptoms (p. 88).<sup>29</sup>

Mobile technology is increasingly popular in disseminating information. Varshney (2014) stated in a study that mobile technology could be used as a medium for the delivery of health care and information (pp. 66–77).<sup>30</sup>

Due to the popularization of ICT tools, most people, particularly those who are especially belonging to the youth sector, disclose their feelings that could be associated with negative ones with updates on Facebook and other social networking sites (Whitehill et al., 2013, pp.122–127).<sup>31</sup> Therefore, utilizing mobile phones as a medium for a mental health network could be an accessible and practical approach to improving mental health in the Philippines.

People who are experiencing mental illnesses spend their time with their mobile phones and would resort to expressing themselves online rather than talking it out with a person (Wright et al., 2013, pp.41–57). This is to protect themselves

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<sup>28</sup>Jiao, C. (2016). Smartphone users to double to 90 million in five years. CNN Philippines. <https://cnnphilippines.com/business/2016/07/12/smartphone-users-90-million-in-five-years.html>

<sup>29</sup>Cheng, P.G.F., Ramos, R.M., Bitsch, J.Á., Jonas, S.M., Ix, T., See, P.L.Q., & Wehrle, K. (2016). Psychologist in a pocket: Lexicon development and content validation of a mobile-based application for depression screening. *The Journal of Medical Internet Research MhealthUhealth*, Volume 4, No. 3, p.88. DOI: <https://doi.org/10.2196/mhealth.5284>

<sup>30</sup>Varshney, U. (2014). A model for improving quality of decisions in mobile health, *Decision Support Systems. Decision Support Systems*, Vol. 62, pp.66-77. DOI: <https://doi.org/10.1016/j.dss.2014.03.005>

<sup>31</sup>Whitehill, J.M., Brockman, L.N., & Moreno, M.A. (2013). "Just talk to me": communicating with college students about depression disclosures on Facebook. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, Vol. 52, No. 1, pp.122-127. DOI: <https://doi.org/10.1016/j.jadohealth.2012.09.015>

from judgment and, at the same time, posting a cry for help in their social media accounts and hoping that someone would reach out.<sup>32</sup>

De Choudry et al. (2013) stated in a study that mobile monitoring could recognize someone's mental state through data collection associated with negative emotions (pp.128–137).<sup>33</sup> These negative emotions could be recognized in terms of words, emotions, patterns, etc. Mobile monitoring could also be used to detect symptoms of mental illnesses if the person has been reading more tips and facts about depression (Park et al., 2013).<sup>34</sup> Aside from collecting tips and facts on mental illnesses, a person with a mental condition could be detected if he or she has been expressing suicidal feelings or communicating suicide-related behavior on social media (Schwartz et al., 2014, pp. 118–125; Robinson et al., 2015, pp.27–35).<sup>35,36</sup>

A series of studies state that using mobile technology is convenient information accessibility without the threat of vulnerability as it is a private experience (Epstein & Bequette, 2013, pp. 283–295; Brian & Ben-Zeev, 2014, pp. 96–100).<sup>37,38</sup>

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<sup>32</sup>Wright, KB., Rosenberg, J., & Egbert, N. (2013). Communication competence, social support, and depression among college students: a model of Facebook and face-to-face support network influence. *Journal of Health Communication*, Vol. 18, No. 1, pp.41-57. DOI: <https://doi.org/10.1080/10810730.2012.688250>

<sup>33</sup>De Choudhury, M., Gamon, M., Counts, S., & Horvitz, E. (2021). Predicting Depression via Social Media. *Proceedings of the International AAAI Conference on Web and Social Media*, Vol. 7, No. 1, pp.128-137. DOI: <https://doi.org/ojs.aaai.org/index.php/ICWSM/article/view/14432>

<sup>34</sup>Park, S., Lee, S.W., Kwak, J., Cha, M., & Jeong, B. (2013). Activities on Facebook reveal the depressive state of users. *Journal of Medical Internet Research*, Vol. 15, No. 10. DOI: <https://doi.org/10.2196/jmir.2718>

<sup>35</sup>Schwartz, H. A., Eichstaedt, J., Kern, M.L., Park, G., Sap, M., Stillwell, D., Kosinski, M., & Ungar, L. (2014). Towards assessing changes in degree of depression through Facebook, Proceedings of the Workshop on Computational Linguistics and Clinical Psychology: From Linguistic Signal to Clinical Reality. *Association for Computational Linguistics*, pp.118-125. DOI: <https://doi.org/10.3115/v1/W14-3214>

<sup>36</sup>Robinson, J., Rodrigues, M., Fisher, S., Bailey, E., & Herrman, H. (2015). Social media and suicide prevention: findings from a stakeholder survey. *Shanghai Archives of Psychiatry*, Vol. 27, No. 1, pp.27-35. <https://doi.org/10.11919/j.issn.1002-0829.214133>

<sup>37</sup>Epstein, J. & Bequette, A. (2013). Smart phone applications in clinical practice. *Journal of Mental Health Counseling*, Vol. 35, No. 4, pp.283-295. DOI: <https://doi.org/10.17744/mehc.35.4.f85k258620765tj4>

<sup>38</sup>Brian, R.M. & Ben-Zeev, D. (2014). Mobile health (mHealth) for mental health in Asia: objectives, strategies, and limitations. *Asian Journal of Psychiatry*, Vol. 10, pp.96-100. DOI: <https://doi.org/10.1016/j.ajp.2014.04.006>

Garcia et al. (2014) classified mobile technology as not only as a mere information distributor as an initial clinical assessment because it could record mood disturbances (p. 3).<sup>39</sup> Another study stated that mobile phone software programs will allow professionals in psychology to deliver medical information, gather physiological data, and accomplish a pre-diagnosis report. These mobile service features would enable professionals to detect, monitor, and evaluate a person within their areas of responsibility (Huguet et al., 2015, p. 39).<sup>40</sup> Through this strategy, mental health response would shift from reactive to becoming proactive that is essential in determining intervention measures. There is also the Ecological Momentary Assessment where mobile services could detect certain behavioral patterns of the mobile user that could be measured over time (Yang et al., 2015, p. 67).<sup>41</sup>

Mobile phones facilitate engagement because it has been already ingrained in people's lifestyles. A study by Torous et al. (2014) claimed that mobile technology is a natural medium that has been integrated in the daily routines of individuals. Therefore, through this medium, it becomes convenient to develop mental health literacy (p. 2).<sup>42</sup>

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<sup>39</sup>Garcia, C., Hardeman, R.R., Kwon, G., Lando-King, E., Zhang, L., Genis, T., Brady, S.S., & Kinder, E. (2014). Teenagers and texting: use of a youth ecological momentary assessment system in trajectory health research with Latina adolescents. *The Journal of Medical Internet Research MhealthUhealth*, Vol. 2, No. 1, p.3  
DOI: <https://doi.org/10.2196/mhealth.2576>

<sup>40</sup>Huguet, A., McGrath, P.J., Wheaton, M., Mackinnon, S.P., Rozario, S., Tougas, M.E., Stinson, J.N., & MacLean, C. (2015). Testing the feasibility and psychometric properties of a mobile diary (myWHI) in adolescents and young adults with headaches. *The Journal of Medical Internet Research MhealthUhealth*, Vol.3, No. 2, p.39. DOI: <https://doi.org/10.2196/mhealth.3879>

<sup>41</sup>Yang, C., Linas, B., Kirk, G., Bollinger, R., Chang, L., Chander, G., Siconolfi, D., Braxton, S., Rudolph, A., & Latkin, C. (2015). Feasibility and acceptability of smartphone-based ecological momentary assessment of alcohol use among African American men who have sex with men in Baltimore. *The Journal of Medical Internet Research MhealthUhealth*, Vol. 3, No. 2, p.67. DOI: <https://doi.org/10.2196/mhealth.4344>

<sup>42</sup>Torous, J., Friedman, R., & Keshavan, M. (2014). Smartphone ownership and interest in mobile applications to monitor symptoms of mental health conditions, Vol. 2, No. 1, p.2. *The Journal of Medical Internet Research MhealthUhealth*. DOI: <https://doi.org/10.2196/mhealth.2994>

To improve mental health literacy, a study by Reidy et al. (2016) recommended that Clinical Commissioning Groups should need to focus more on the early strategic planning of lay involvement to provide an avenue for genuine engagement so that support can be provided for communities and individuals in a way people will engage with. With engagement, awareness of mental conditions would eradicate stigma, and intervention is possible to manage mental health conditions.<sup>43</sup>

### **Related Legal Basis in the Philippines**

Legislation on mental health in the Philippines is yet to be developed. The first mental health legislation was signed into law on June 21, 2018, as Republic Act No. 11036 or the Mental Health Policy that aims to enhance integrated mental health services, the promotion of mental health services, protection of people who use the said services, and the establishment of a Philippine mental health council.

The 2005 World Health Survey conducted in the country identified that of the 10,074 participants, there were 0.4% who have been diagnosed with schizophrenia and 14.5% had a diagnosis of depression. Of those with a diagnosis of schizophrenia, 33.2% had received treatment or screening in the past 2 weeks, compared with 14% of those with a diagnosis of depression. In this regard, the common illnesses in the Philippines include the ones mentioned, and yet only a few cases were reported, and even less has undergone treatment (WHO & DOH, 2007).<sup>44</sup>

### **Conceptual Framework**

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<sup>43</sup>Redaniel, M.T., Lebanan-Dalida, M.A., & Gunnell, D. (2011). Suicide in the Philippines: time trend analysis (1974–2005) and literature review. *BIOMED CENTRAL Public Health*, Vol. 11, p.536. <https://doi.org/10.1186/1471-2458-11-536>

<sup>44</sup>World Health Organization (WHO) & Department of Health (DOH). (2007). *WHO-AIMS Report on Mental Health System in the Philippines*. DOI: [https://doi.org/www.who.int/mental\\_health/evidence/philippines\\_who\\_aims\\_report.pdf](https://doi.org/www.who.int/mental_health/evidence/philippines_who_aims_report.pdf)

Hochbaum, Rosenstock, and Kegels developed HBM in 1952 and has been classified as one of the health communication models for health education (pp.328-335).<sup>45</sup>

The HBM is a model of predicting health-related behavior that considers belief patterns. The model evaluates a person's behavior according to three categories: *individual perceptions, modifying factors, and likelihood of action.*

These are the explanations to the three categories that influence people's health-related behavior:

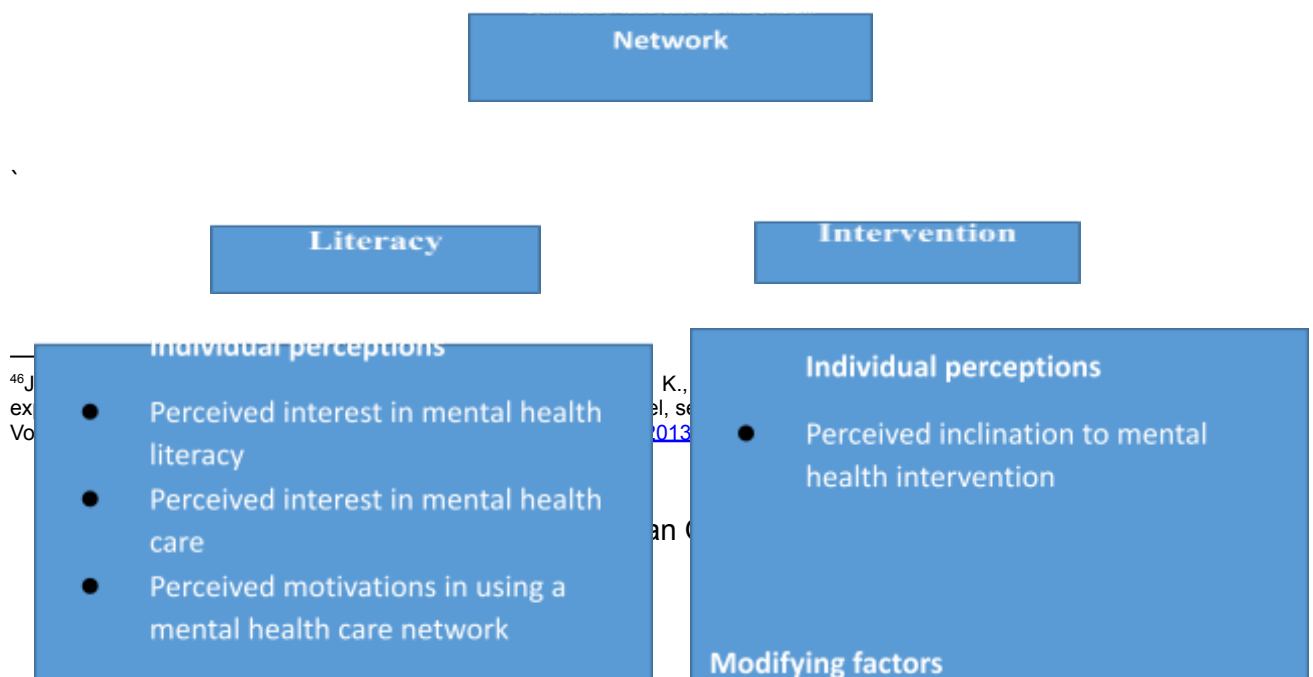
1. *Individual perceptions:* People's health-related behaviors are measured by determining their degree of perception toward illness, perceived susceptibility, and perceived severity.
2. *Modifying factors:* People's health-related behaviors are measured by determining their demographic variables, perceived threat, and cues to action.
3. *The likelihood of action:* People's health-related behaviors are measured by determining their perceived benefits and perceived barriers of taking the recommended health action.

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<sup>45</sup>Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monographs*, Vol. 2, No.4, pp.328-335.

The HBM is an explanatory framework that had been developed to model the replication of preventive health behaviors and has been frequently used across diverse cultures(Jones et al., 2015, pp.566–576).<sup>46</sup>

The model is used to determine human behavior in engaging in new or existing behavior because it is the model that has been frequently used in health education. Since health-related behavior is influenced by health perceptions, there is a necessity in changing or improving perceptions to engage in desired behavior. The study determines the factors in each category developed by the model to predict and evaluate the behavioral patterns by respondents toward mental health literacy and mental health intervention.



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**Figure 1.** *Conceptual framework of Toward an Online Mental Health Literacy Model*

Figure 1 is the schematic diagram of the HBM applied in the study Toward an Online Mental Health Literacy Model.

The model represents how mental health literacy and mental health intervention are achieved by determining the three categories indicated in the health belief.

**a. Mental health literacy**

The factors that determine mental health literacy are as follows:

- a. *Individual perceptions:* perceived interest in mental health literacy, perceived interest in mental health care, and perceived motivations in using a mental health care network.

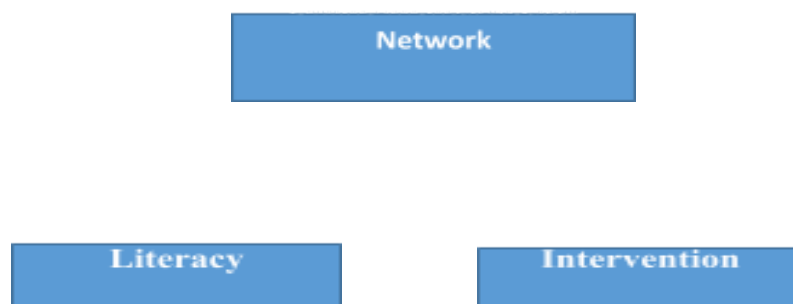
- b. *Modifying factors*: demographics, mental health content, and features of mental health literacy network.
- c. *Likelihood of actions*: use of mental health network for mental health literacy.

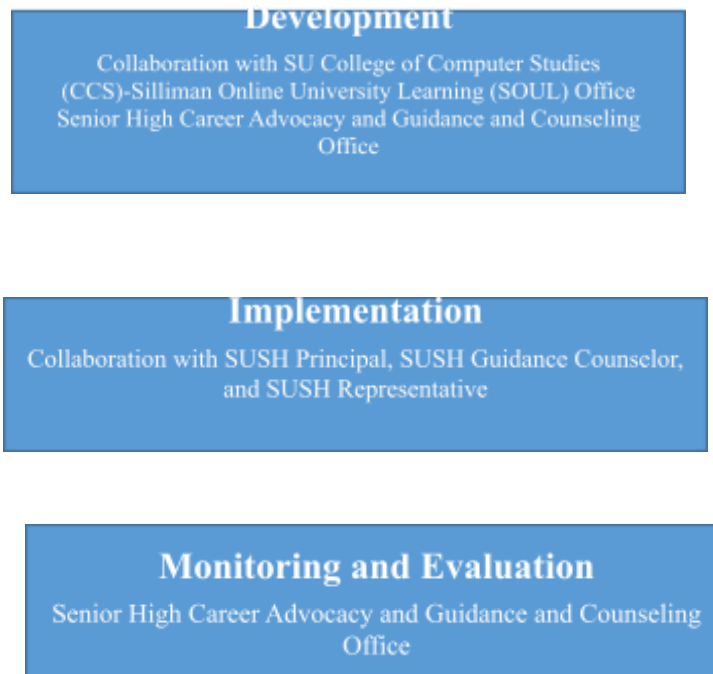
**b. Mental health intervention**

The factors that determine mental health literacy are as follows:

- a. *Individual perceptions*: perceived inclinations to mental health intervention.
- b. *Modifying factors*: communication platform, protocol in mental health expert intervention, and features of the communication platform.
- c. *Likelihood of actions*: use of communication platform for mental health intervention.

**Operational Framework**





**Figure 2.** Operational framework of Toward an Online Mental Health Literacy Model

The Mental Health Communication Network for Senior High School Students is motivated in two aspects: mental health literacy through information and mental health expert intervention through communication (Figure 2).

1. **Mental health literacy** is the instilling of consciousness about different mental health issues and mental health care. It is achieved through the development of mental health topics into multimedia communication tools, multimedia activities, and virtual support system. As mentioned in the study by Tuliao (2014), mental health literacy is yet to be developed in the Philippines because public stigma discouraged most Filipinos from seeking help from mental health illness because they might lose their social integrity (pp. 124–136).<sup>47</sup>

<sup>47</sup>Tuliao, A.P. (2014). Mental health help seeking among Filipinos: a review of the literature. *Asia Pacific Journal of Counselling and Psychotherapy*, Vol. 5, No. 2, pp.124-136. DOI: <https://doi.org/10.1080/21507686.2014.913641>

2. **Mental health intervention** through communication is the development of a secured communication platform between the mental health expert and senior high school students. A study by Staiger et al. (2017) revealed that greater mental health literacy would prompt people to seek formal help from professionals and informal help from family and friends (p.39).<sup>48</sup>
  
3. The **development** of the mental health communication network is conducted through the collaboration with the Senior High Career Advocacy and Guidance and Counseling Office for the review and approval of the mental health network and SOUL through the Department of the College of Computer Studies for the technical development of the network through the SOUL platform. The platform mySOUL is an all-in-one web-based teaching and learning platform where asynchronous activities could be conducted.
  
4. The **implementation** of the mental health communication network to senior high school students is conducted with the collaboration with the senior high school principal, senior high school representative, and senior high school guidance counselor.
  
5. The **monitoring and evaluation** of the mental health communication network would be conducted by the Senior High Career Advocacy and Guidance and Counseling Office after the development and implementation of the network.

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<sup>48</sup>Staiger, T., Waldmann, T., Rüsçh, N., &Krumm, S. (2017). Barriers and facilitators of help-seeking among unemployed persons with mental health problems: a qualitative study. BIOMED CENTRAL Health Services Research, Vol. 17, No. 1, p.39. DOI: <https://doi.org/10.1186/s12913-017-1997-6>

## **Chapter III**

### **METHODOLOGY**

#### **Research Design**

This study used an exploratory–descriptive research design using mixed methods in obtaining quantitative and qualitative data. The research design of the

mental health network is exploratory in nature as it is a proposed development of mental health care to be integrated with ICT. The study focuses on the perceived needs and perceived support of the recipients (student respondents) and administrative personnel for their perceived support in the development and implementation of the network.

Arboleda (1991) stated that an exploratory research design is preferably used to gather information about the practical problems of researching on particular conjectural statements. An exploratory research design was also used to formulate problems for further investigations in developing hypotheses and also supplies knowledge and experience for further studies (1991).<sup>49</sup>

This study determined the needs of its end-users before an innovation is developed and used. In this regard, this study becomes a foundation of further studies on the improvement of mental health care in the locale of the study.

The study used a descriptive design because a descriptive design is used to make specific predictions. The study aimed to predict the content, features, and design of a mental health communication network according to the responses of the end-users. McCombes (2019) stated that a descriptive research design is selected because the study merely observes and measures gathered data from a mass survey and does not control variables.<sup>50</sup>

In this study, it was described how respondents were likely to treat mental health care in a more objective perspective when knowledge will be accessible. It

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<sup>49</sup>Staiger, T., Waldmann, T., Rüschi, N., & Krumm, S. (2017). Barriers and facilitators of help-seeking among unemployed persons with mental health problems: a qualitative study. *BIOMED CENTRAL Health Services Research*, Vol. 17, No. 1, p.39. DOI: <https://doi.org/10.1186/s12913-017-1997-6>

<sup>50</sup>McCombes, S. (2019). *Research Design: Types, Methods, and Examples*. Scribbr

also described how respondents are highly probable to discuss their mental health inquiries to experts if they are provided with an interactive network.

This study used mixed methods in collecting information. These mixed methods included having obtained quantitative data from the surveys distributed through Google Forms to senior high school students, while interviews conducted through Zoom meetings with authorities were used in obtaining qualitative data.

The collection of data through online platforms was conducted to adhere to the health protocols of COVID-19. The researcher has not been able to distribute the surveys and conduct the interviews in person to mitigate the risk of COVID-19 transmission.

### **Locale of the Study**

The study was conducted in SU Dumaguete in Dumaguete, Negros Oriental. SU Dumaguete is a private research university established in 1901 by the Presbyterian Board of Foreign Missions.

### **Respondents**

The respondents for the study were Grade 12 senior high school students of SU enrolled in the school year 2021–2022 in gathering quantitative data. The study selected Grade 12 students because they have already accumulated sufficient academic experience in senior high school.

Senior high schools in the Philippines offer different preparatory college strands. These include Accountancy, Business, and Management (ABM); Humanities

and Social Sciences (HUMSS); Science, Technology, Engineering, and Mathematics (STEM); General Academic Strand; Technical-Vocational Livelihood Track; Arts and Design; and Sports Track.<sup>51</sup>In SU Senior High School, they offer four strands that are tailored-fit according to the interest of senior high students in different fields of study or disciplines.

For the academic track, these strands include ABM, STEAM (Science, Technology, Engineering, Agriculture, and Math), and HUMSS.

Another non-academic strand includes the Arts and Design Career Track. The SU senior high school office reported that there were 768 students enrolled in Grade 12 senior high school students for the school year 2021–2022 (L. Sarming, SUSH coordinator, *personal communication*, September 10, 2021). Please see Table 2 for the official report of the Population of enrolled Grade 12 Students in SU Senior High School from 2021–2022.

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51

List of Senior High Schools. (n.d.). Department of Education.  
<https://www.deped.gov.ph/k-to-12/senior-high-school/list-of-senior-high-schools/>

Population of enrolled Grade 12 students in Silliman University Senior High School SY 2021–2022	
STRAND	TOTAL
Accountancy, Business, and Management (ABM)	58
Science, Technology, Engineering, Agriculture and Math (STEAM)	585
Humanities and Social Sciences (HUMMS)	62
Arts and Design	25
To be sorted (as of first week of enrollment)	38
<b>TOTAL</b>	<b>768</b>

Table 2. Population of enrolled Grade 12 students in Silliman University Senior High School SY 2021–2022

In having obtained qualitative data, four stakeholders in the university were interviewed for their expertise or authority in the development and implementation of the mental health program in the university. These interviews were motivated in formulating a comprehensive and collaborative process in the development and implementation of a mental health communication network.

Among the four experts, two of them will perform crucial roles in the development of the program, while two of them are the authorities in the implementation of the program.

Two experts are interviewed for the development of the network. These experts include a SOUL Training Specialist for the technical development of the program and the Guidance counselor of the Senior High Career Advocacy and

Guidance and Counseling Office for the selection, review, organization, and approval of the mental health content.

The researcher interviewed two other for the implementation. TheSU senior high school principal was interviewed as the authority in the approval and support of the program in senior high school. The current SUSH Governor for SY 2021–2022 was also interviewed as the student government authority in the introduction and implementation of the program among the senior high school students.

Please see Table 3 below for the list of experts for the development and implementation of the mental health network.

Table 3. Experts and authorities in the implementation of the mental health communication network

Experts and authorities in the implementation of the mental health communication network (2021–2022)			
	Position	Department	Roles
<b>Development</b>	Silliman Online University Learning (SOUL) Training Specialist	College of Computer Studies (CCS)	Information and Communication Technology (ICT) development of the interface and functions of the mental health content and communication platform of the Mental Health Communication Network Program
	Senior High School (SUSH) Guidance Counselor	Senior High Career Advocacy & Guidance & Counseling Office	Review and approval of mental health content to be included in the mental health communication network.  The focal person for the guidance office's operation of the communication platform
<b>Implementation</b>	SUSH Principal	SU Senior High School Office	The main authority of SUSH office for the review, approval, and support of the mental health communication network
	SUSH Governor	Senior High School Governor	The authority of the senior high school student government who will introduce and implement the program through information drive, activities, etc.

## Research Instrument

### Quantitative data

The study formulated a survey as a research instrument in gathering the quantitative data. The research instrument had been selected as a research tool

because it is most useful in determining levels of knowledge, skills, and attitude. A mass survey does not need to include entire populations. It could also be distributed to a sample number of respondents who have been stratified from the population.<sup>52</sup>

A survey as a research instrument was also developed by anticipating the needs of respondents. The mass survey generates straightforward answers as it is developed with structured-direct interviews that pre-specified a list of direct questions. The mass survey is also a questionnaire that has the same sequences for all the respondents who participated in the study (Arboleda, 1991).

### **Qualitative data**

The study used the Unstructured-Direct Interview Method to gather qualitative data. Unstructured-Direct Interview makes use of individual or group depth interview that uses open-ended questions for respondents to freely express their opinions on the questions raised by the researcher (Arboleda, 1991).

### **Sampling Procedure**

#### **Quantitative data**

To determine the number of population sample from the 768 respondents, the study used the Slovin's formula to estimate a population proportion using a confidence coefficient of 95% or 1.96.

$$n = \frac{N}{1 + Ne^2},$$
$$n = \frac{768}{1 + (768)(0.05)^2},$$
$$n = 263.$$

Derived from Slovin's formula, the study needed to obtain 263 respondents to answer the questionnaires to reach the 95% confidence level.

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<sup>52</sup>

The next sampling procedure used a probability sampling method in distributing the surveys. Cited in Arboleda (1991), Borg and Gall stated that a random sample provides an equal opportunity for each individual in the defined population to be included in the study. A stratified random sampling procedure was appropriate because it guaranteed that certain subgroups on the population will be represented in the sample in proportion to their numbers on the population itself.<sup>53</sup>

In this study, the surveys were distributed to the students belonging to the four strands in senior high school, namely, STEAM, ABM, HUMMS, and Arts and Design. This was to guarantee that respondents from each subgroup from the population sample would be represented.

However, due to the challenges that the survey distribution incurred due to the limited mobility brought by the COVID-19 health protocols, the study did not reach the target sample size of 263. Instead, it yielded 226 responses or 86% of the target sample size.

To review and validate if the incurred sample size has reached the 95% confidence level, the study used the Margin of Error (MOE) equation. The end result of the estimation process also has an error and is represented by the MOE. Since the total population size is already established in the study, the MOE equation with finite population correction is used.

Before validating the sample size using the MOE equation, the sample proportion had to be determined first as show in Table 4.

According to the equation, the proportion percentage is 29.43% or .2943.

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<sup>53</sup>Arboleda, C. (1991c). Sampling designs and procedures(2, p.117).*Communication Research*. Philippines: Chevalier Publishing & Printing Center

Table 4. Proportion percentage calculation

Proportion Percentage		
$\hat{p} = \frac{x}{n},$ <p>where</p> <p><b><math>\hat{p}</math> = Proportion Percentage</b>  <b><math>x</math> = sample size</b>  <b><math>n</math> = total population size</b></p>	$\hat{p} = \frac{x}{n},$ <p>where</p> <p><b><math>x = 226</math></b>  <b><math>n = 768</math></b></p>	$\hat{p} = \frac{x}{n}$ $\hat{p} = \frac{226}{768}$ $\hat{p} = 29.43\%/.2943$

According to the MOE equation, the turnout from the desired sample population still yielded 4.995% or 5% as show in Table 5.

Table 5. Margin of Error (MOE) equation

Margin of Error (MOE)		
$MOE = \frac{z^* \sqrt{p^* \frac{n}{(N-1)} (1-p)}}{(N-1)^* \frac{n}{(N-n)}},$ <p>where</p> <p><b>MOE = Margin of Error</b>  <b><math>z</math> is the zscore associated with a level of confidence</b>  <b><math>p</math> is the sample proportion, expressed as a decimal</b>  <b><math>n</math> is the sample size</b>  <b><math>N</math> is the population size</b></p>	$MOE = \frac{z^* \sqrt{p^* \frac{n}{(N-1)} (1-p)}}{(N-1)^* \frac{n}{(N-n)}},$ <p>where</p> <p><b><math>z = 1.96</math></b>  <b><math>p = 0.2943</math></b>  <b><math>n = 226</math></b>  <b><math>N = 768</math></b></p>	$MOE = \frac{z^* \sqrt{p^* \frac{n}{(N-1)} (1-p)}}{(N-1)^* \frac{n}{(N-n)}}$ $MOE = \frac{1.96 * \sqrt{0.2943 * \frac{226}{(768-1)} (1-0.2943)}}{(768-1)^* \frac{226}{(768-226)}}$ $MOE = \frac{0.893}{17.883 * 100}$ $MOE = \pm 4.995\%$ $MOE = 5\%$

### Qualitative data

The expert sampling technique was used in determining the four stakeholders for conducting the unstructured-direct interviews. According to Frey (2018), the expert sampling is used in selecting people who are experts in their fields to interview. These people could contribute significant insights into development and

challenges into the study because they already have acquired experience in their fields that gives them credibility.<sup>54</sup>

## **Data Collection**

### **Quantitative data**

The researcher applied for the ethical review of the study to the SU University Research Committee (UREC). Upon the approval of the study's ethical considerations, the researcher presented the Certificate of Approval (Appendix 1) from UREC to the senior high school office.

The researcher coordinated with the senior high school office by sending a Letter of Request to the senior high school principal to seek permission in studying in the senior high school department. The researcher had also secured the Enrollment Report (Appendix 2) to determine the total population of the students enrolled in school year 2021–2022.

After permission has been sought, the researcher coordinated with subject teachers handling Grade 12 sections from different Academic strands by sending a letter of request for coordination.

Upon coordination, a schedule has been set when the research instrument will be distributed. Due to the restrictions brought by the COVID-19 pandemic when this study is conducted, the surveys were only distributed through Google Forms by the senior high school teachers.

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<sup>54</sup>Frey, B. (2018). *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. SAGE Publications, Inc. DOI: <https://dx.doi.org/10.4135/9781506326139.n251>

When collaboration had been forged with the subject teachers, the researcher had conducted a pre-test among seven respondents. The pre-test involved the collection of information through the use of a questionnaire from a sample of the target audience (Arboleda, 1991).<sup>55</sup> After the pre-test stage, the researcher was able to determine the significant modifications by soliciting opinions from the respondents who participated in the pre-test. The answers from the pre-test surveys will not be included in the final frequency tally.

After the pre-test was conducted and modifications have been done, the researcher has instructed the teachers to distribute the questionnaires to the respondents.

### **Qualitative data**

The researcher gathered qualitative data from the experts and authorities in seeking a comprehensive and collaborative process in the development and implementation of a mental health communication network.

The researcher sought interview appointments (Appendices 5–8) with the senior high school principal, senior high school representative, SOUL Training Specialist, and senior high school guidance counselor.

An Unstructured-Direct Interview uses individual or group depth interviews. The interviewees were asked open-ended questions for the respondents to freely express their opinions, beliefs, and feelings (Arboleda, 1991).<sup>56</sup>

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<sup>55</sup>Arboleda, C.R. (1991d). Data processing (2, p. 201).*CommunicationResearch*.Chevalier Publishing and Printing Center CFA Media Group.

<sup>56</sup>Arboleda, C.R. (1991d). Data processing (2, p. 201).*CommunicationResearch*.Chevalier Publishing and Printing Center CFA Media Group.

The open-ended questions would be tailored according to these factors in the development and implementation of the mental health communication network:

1. Discussion of the mental health care state in the university through the perspectives of the four stakeholders.
2. The feasibility of the introduction of a mental health communication program.
3. How the stakeholders would support the program.
4. The perceived challenges that the stakeholders in the implementation of the program.
5. The suggestions of the stakeholders in the development and implementation of the program.

Due to the adherence to the COVID-19 health protocols, the interviews have been conducted through online video calling platforms.

## **Data Interpretation and Presentation**

### **Quantitative data**

After conducting the distribution of the research instrument in gathering quantitative data, the research has gathered the surveys and proceeded to tally the answers from each respondent to determine the frequencies for each test item.

The quantitative data would be presented in bar graphs. Arboleda (1991) explained that a bar chart shows magnitudes of data by the length of various bars which have been laid out with the reference to a horizontal or vertical scale. It is easily constructed and identified to non-technical readers.<sup>57</sup>

### **Qualitative data**

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<sup>57</sup>Arboleda, C.R. (1991d). Data processing (2, p. 201). *Communication Research*. Chevalier Publishing and Printing Center CFA Media Group.

Meanwhile, the qualitative data gathered from the unstructured-direct interview have been consolidated, presented in the tabular format, and discussed in the presentation of data.

Afterward, the conclusions and the recommendations from the study have been formulated based on the quantitative and qualitative data obtained from the respondents.

### **Ethical Consideration**

This study sought to formulate the design, development, and implementation of a mental health communication network and is named as 2Ik2Me. It is designed to be private, accessible, and a safe space based on the needs of end-users, the senior high school students of SU.

This mental health network is a needed medium for information literacy and mental health expert intervention for guiding senior high school students in taking care of their mental health by providing them with an access to reliable mental health care resources such as articles, videos, and journal-related activities.

Aside from the access to mental health resources, the network is also designed to provide a convenient and private communication platform between senior high school students and their guidance counselor for purposes that best serve their personal development.

The researcher acknowledges that this study deals with the sensitive topic of mental health. Therefore, the respondents have been fully informed of the study's

relevance, expectations, and benefits while participating in the study through the letter signed by the researcher before they are going to participate in the study.

Aside from being fully informed of the study's relevance, they have also been provided with the contact information of their guidance counselor for whatever purpose it may serve them in connection with their participation in the study. The study had also encouraged the respondents to visit or to contact the senior high school guidance office for their mental health care concerns.

The respondents of the questionnaires were asked to agree to an informed consent that they have been fully informed of the expectations of the study and that they were provided with their guidance counselor's contact details before participating in the study. They were also informed that their participation was voluntary and that they could also disengage anytime.

The study's intent was to provide a foundation for the design the mental health communication network. It did not ask questions about their mental health nor inquire about having had one before.

A data management plan before, during, and after the study has been prepared. Data have been archived and destroyed once the study was completed. Socio-demographic data have been encoded separately so that there was no link to the other data that will be collected and analyzed.

The researcher committed that the collected information will be intended for research purposes but treated with utmost confidentiality by not divulging the identities of the respondents who participated in the study to protect their individual reputation and to protect the interests of their affiliated institution, SU Dumaguete.

Furthermore, the data collection process was conducted through an online platform, Google Forms, to avoid the risk of COVID-19 transmission.

## Chapter IV

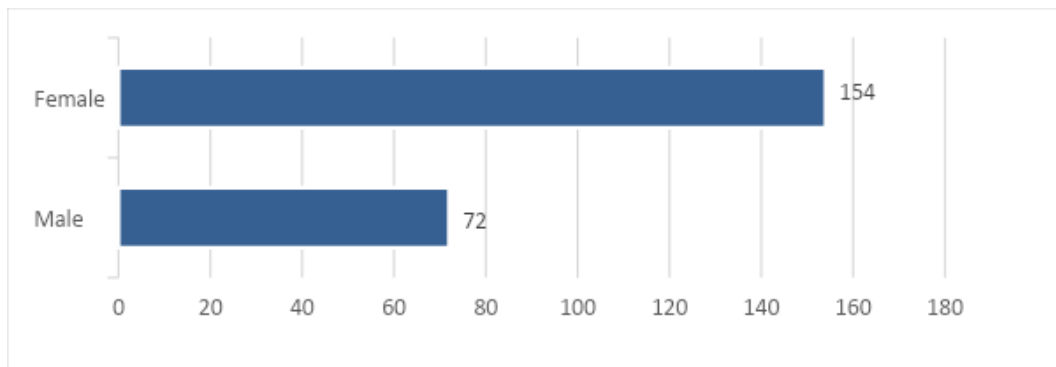
### RESULTS AND DISCUSSION

The study provides an online mental health literacy model for the development and implementation of a mental health communication network based on the needs of senior high school students. When this network is developed, it aims to promote mental health literacy and mental health expert intervention.

#### Profile of respondents

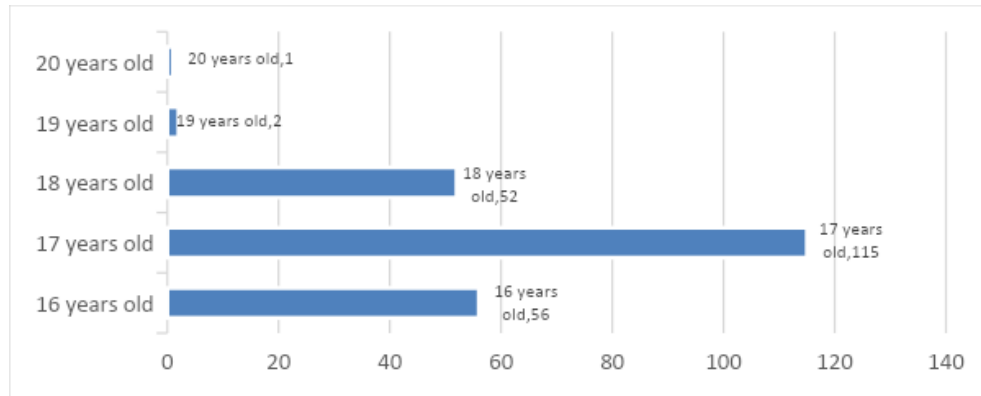
Graph 1 shows that out of 226 respondents, there were 154 (68.1%) females, while 72 (31.9%) were males.

Graph 1. Profile: Biological gender



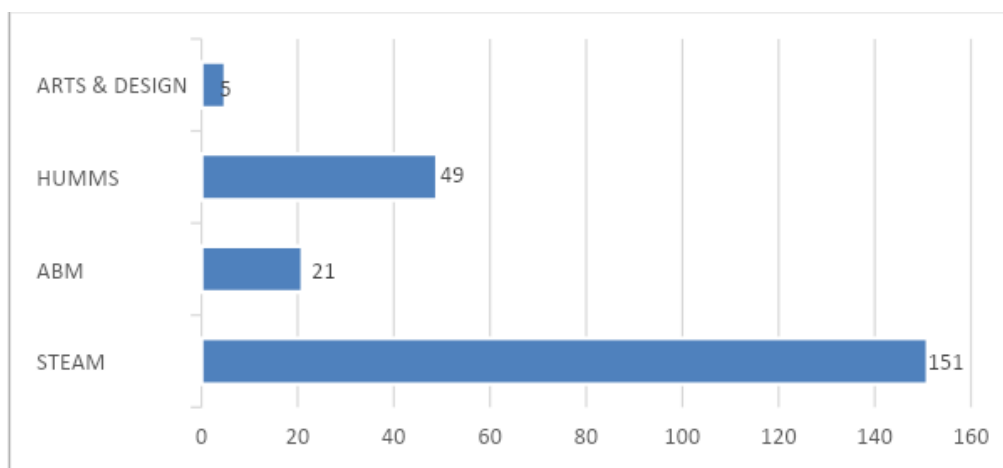
Graph 2 shows that out of 226 respondents, there were 56 (24.8%) of them who were 16 years old, 115 (50.9%) were 17 years old, 52 (23%) were 18 years old, 2 (0.09%) were 19 years old, and 1 (0.4%) was 20 years old.

Graph 2. Profile: Age



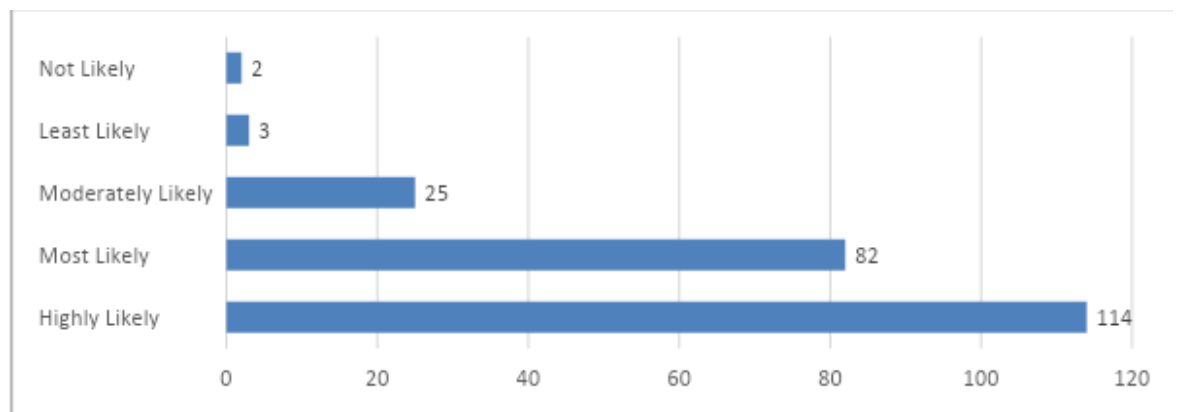
Graph 3 shows that out of 226 respondents, there were 151 (66.8%) who belonged to the Science, Technology, Engineering, Agriculture, and Mathematics (STEAM); 21 (9.3%) belonged to the ABM; 49 (21.7%) belonged to HUMMS strand; and 5 (2.2%) belonged to the Arts and Design track.

Graph 3. Profile: Strand



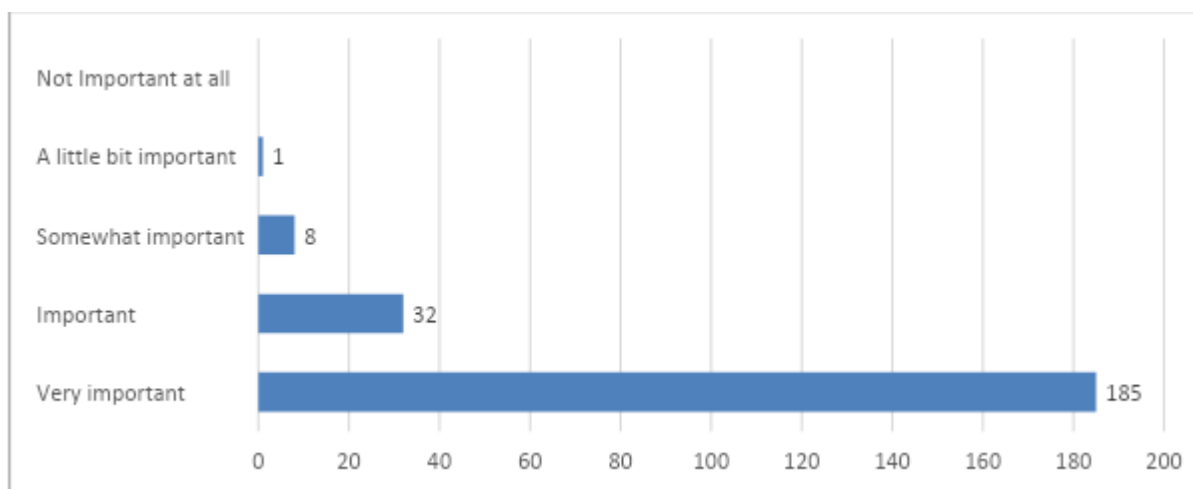
Graph 4 shows that out of 226 respondents, there were 114 (50.4%) of them who answered *highly likely* when asked how likely were they to learn about mental health. Eighty-two (36.3%) of them responded *most likely*, 25 (11.1%) answered *moderately likely*, and 3 (1.3%) answered *least likely*. Two (0.9%) selected *not likely*.

Graph 4. Perceived interest on mental health literacy



Graph 5 shows that out of 226 respondents, there were 185 (81.9%) who answered *very important* when asked about their level of perceived importance in taking care of their mental health. Thirty-two (14.2%) responded *important*, eight (3.6%) answered *somewhat important*, one (0.4%) answered *a little bit important*, and no respondent answered for *not important at all*.

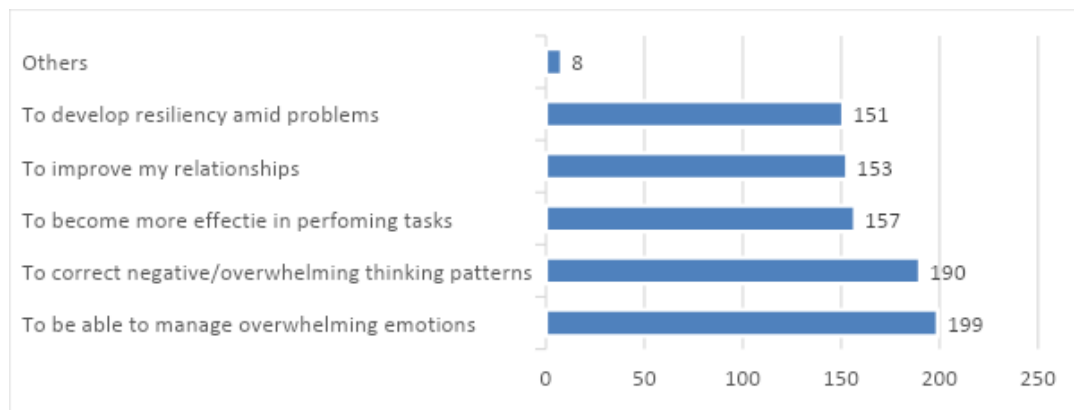
Graph 5. Perceived importance on mental health care



Graph 6 shows the different perceived reasons for mental health care. The respondents were allowed to select multiple items. Out of 226 respondents, there were 199 (88.1%) who selected *to be able to manage overwhelming emotions*, 190 (84.1%) selected *to correct negative/overwhelming thinking patterns*, 157 (69.5%) selected *to become more effective in performing tasks*, 153 (67.7%) selected *to improve my relationships*, and 151 (66.8%) selected *to develop resiliency amid problems*.

There were eight (3.4%) respondents who listed other perceived reasons (to not die early considering the fact of how chaotic this world right now; to grow individually; to see the better positive side of life more accepting; to be able to know when you should ask for help in order to be holistically healthy; taking care of one's mental health is very much necessary because what we do; to finally achieve inner peace; to avoid mental health issues; and say or think to ourselves could reflect that of what we will offer to society).

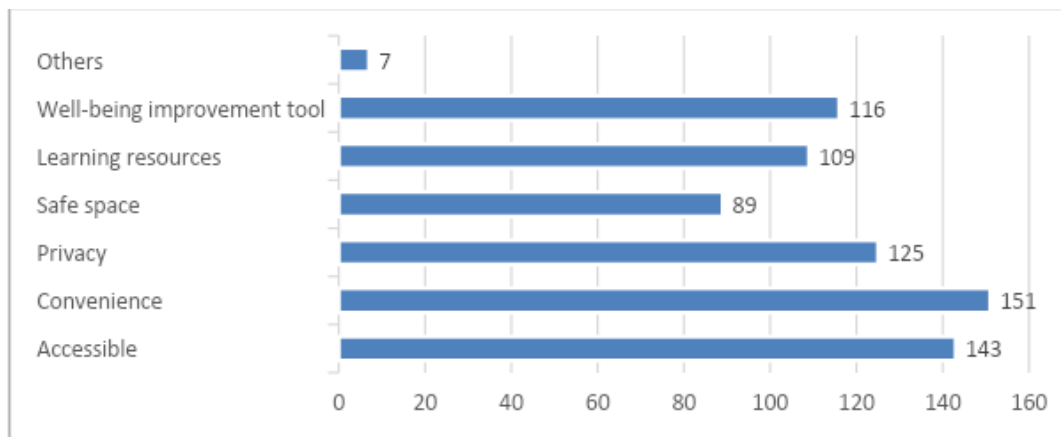
Graph 6. Perceived reasons for mental health care



Graph 7 shows the different end-user needs for a mental health network. The respondents were allowed to select multiple items. Out of 226 respondents, there were 143 (63.3%) selected *accessible*, 151 (66.8%) *convenience*, 125 (55.3%) selected *privacy*, 89 (39.4%) selected *safe space*, 109 (48.2%) selected *learning resource*, and 116 (51.3%) selected *tool for well-being improvement*.

There were seven (3.1%) respondents listed other needs (it would be a great help especially this time when we don't meet actual person all the time; it is accessible for people who are trying to seek help but do not have the proper resources; it is cost-effective; efficient compared to visiting the guidance office; it is relevant for mobile phone users; it gives hope and awareness; and it is like that private music session in Spotify).

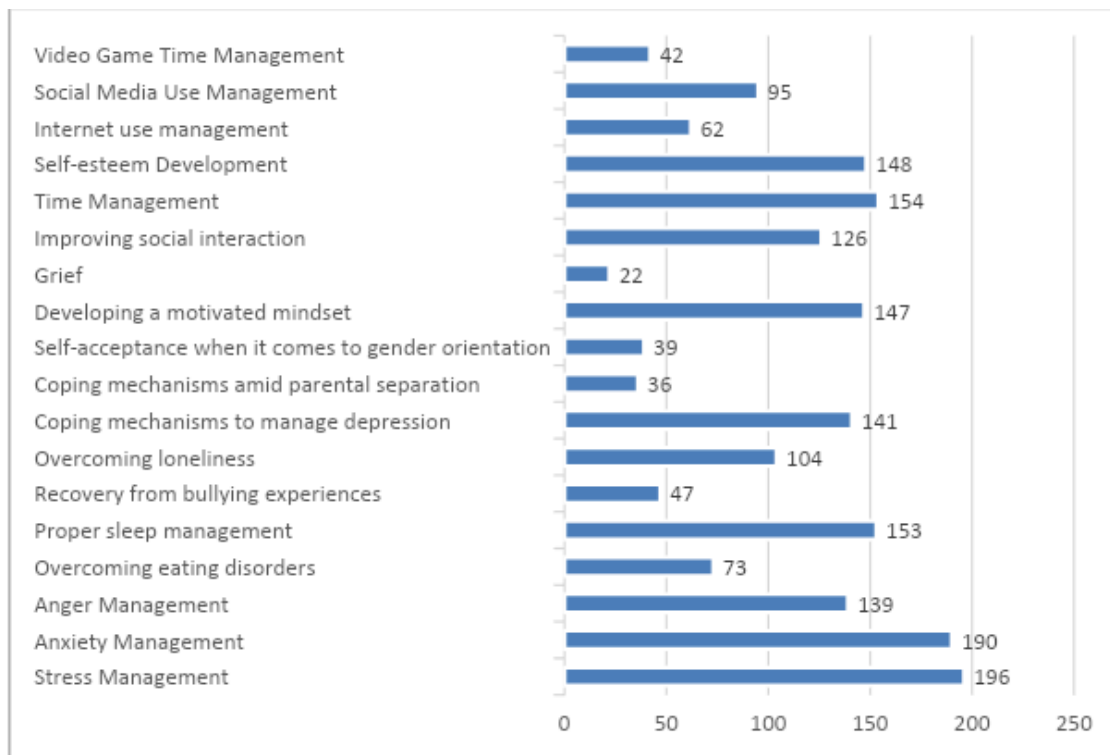
Graph 7. End-user needs for a mental health network



Graph 8 shows the different preferred mental health topics for a mental health network. The respondents were allowed to select multiple items. Out of 226 respondents, there were 196 (86.7%) who selected *stress management*, 190 (84.1%) who selected *anxiety management*, 139 (61.5%) selected for *anger management*, 73 (32.3%) answered *overcoming eating disorders*, 153 (67.7%) selected *proper sleep management*, 47 (20.8%) selected *recovery from bullying experiences*, 104 (46%) selected for *overcoming loneliness*, 141 (62.4%) selected *coping mechanisms to manage depression*, 39 (15.9%) selected for *coping mechanisms amid parental separation*, 39 (17.3%) selected for *self-acceptance when it comes to gender orientation*, 147 (65%) selected for *developing a motivated mindset*, 22 (9.7%) selected for *grief*, 126 (55.8%) selected for *improving social interaction*, 154 (68.1%) selected for *time management*, 148 (65.5%) selected for *self-esteem development*, 62 (27.4%) selected *internet use management*, 95 (42%) selected *social media use management*, 42 (18.6%) selected *video game management*, and 6 (2.65%) respondents specified under *others* (self-love; coping mechanisms regarding emotional trauma; post-traumatic disorder; accepted by my family; managing performance anxiety; and body dysmorphia). The respondents were

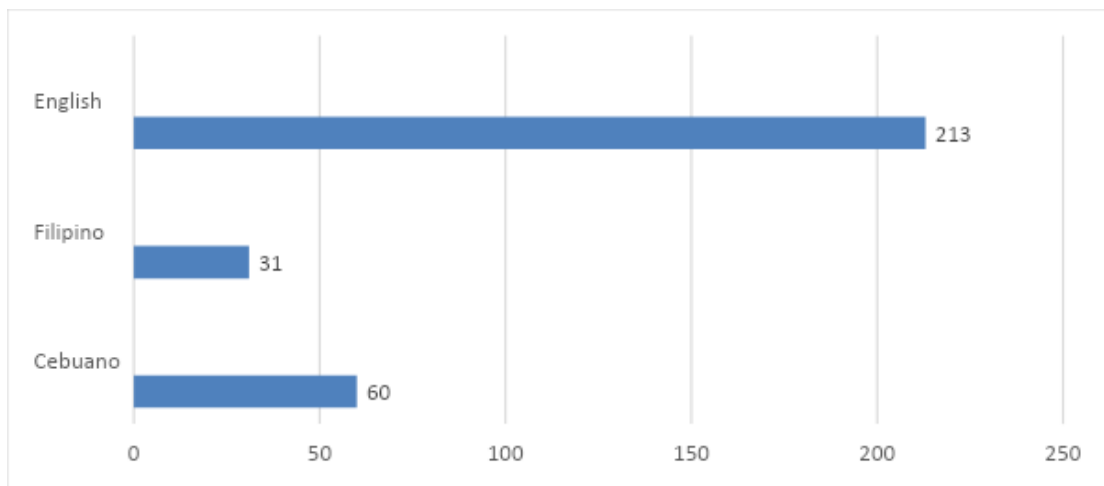
also asked to specify different circumstances under *grief*. These specifications include death of a parent, death of a loved one or pet, how to overcome grief, and grief coming from existential crises.

Graph 8. Preferred mental health topics for the mental health network



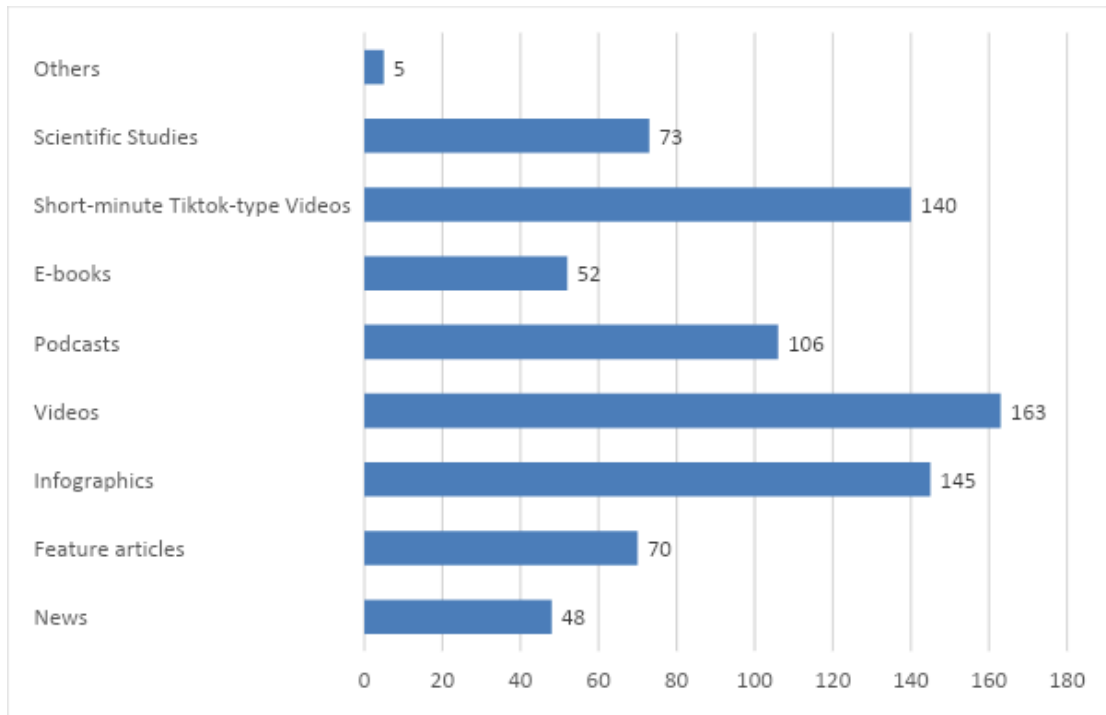
Graph 9 shows the different preferred languages for a mental health network. The respondents were allowed to select multiple items. Out of 226 respondents, 213 (94.2%) selected *English*, 60 (26.5%) selected *Cebuano* dialect, and 31 (13.7%) selected *Filipino*.

Graph 9. Languages for mental health network



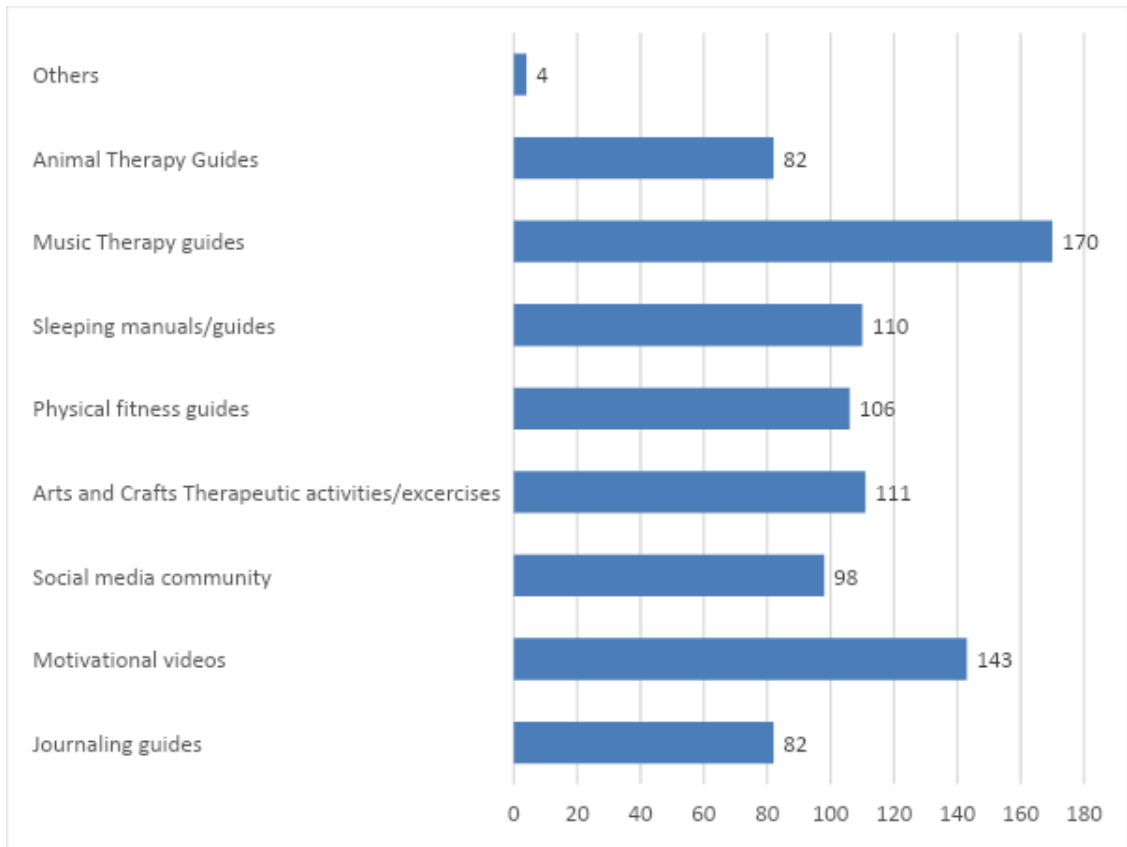
Graph 10 shows the different preferred content formats for a mental health network. The respondents were allowed to select multiple items. Out of 226 respondents, 48 (21.2%) selected *news*, 70 (31%) answered *feature articles*, 145 (64.2%) selected *infographics*, 163 (72.%) selected *videos*, 106 (46.9%) selected *podcasts*, 52 (23%) selected *E-books*, 140 (61.9%) selected *short-minute Tiktok-type videos*, 73 (32.3%) selected *scientific studies*, and 5 (2.2%) respondents specified under *others* (games and/or fun activities; books; pubmats; vlogs; andmovies).

Graph 10. Mental health content formats for mental health network



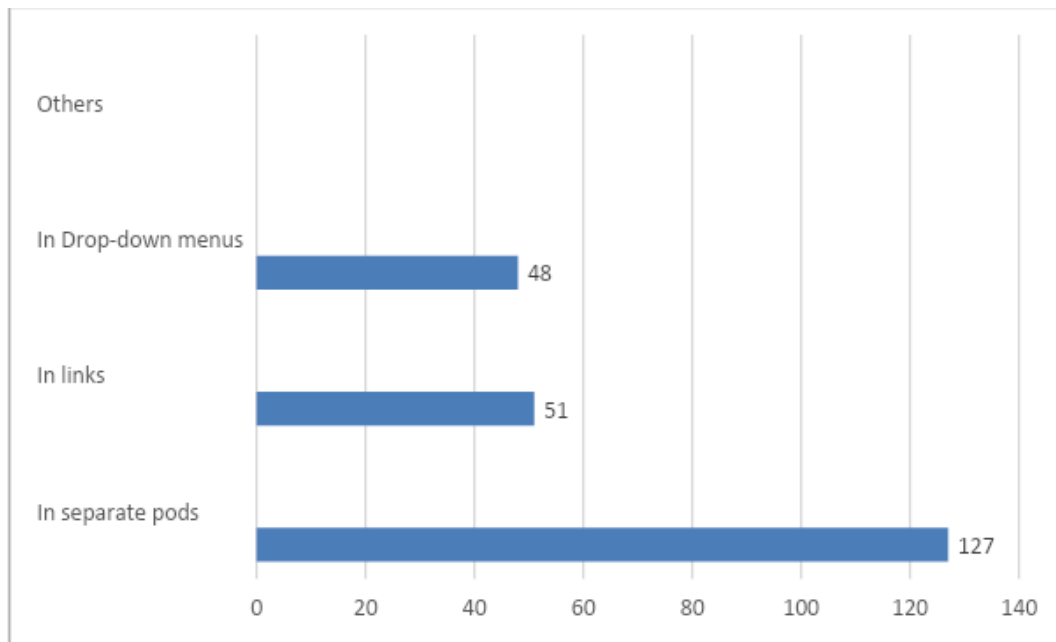
Graph 11 shows the different preferred features for a mental health network. The respondents were allowed to select multiple items. Out of 226 respondents, 82 (36.3%) selected *journaling guides*, 143 (63.3%) selected *motivational videos*, 98 (43.3%) selected *social media community*, 111 (49.1%) selected for *arts and crafts therapeutic activities/exercises*, 106 (46.9%) selected for *physical fitness guides*, 110 (48.7%) for *sleeping manuals/guides*, 170 (75.2%) for *music therapy guides*, 82 (36.3%) selected for *animal therapy guides*, and 4 (1.8%) specified one format under *others* (anonymous diaries; daily reminders; friendship activities; and a sleep podcast).

Graph 11. Preferred features of a mental health network



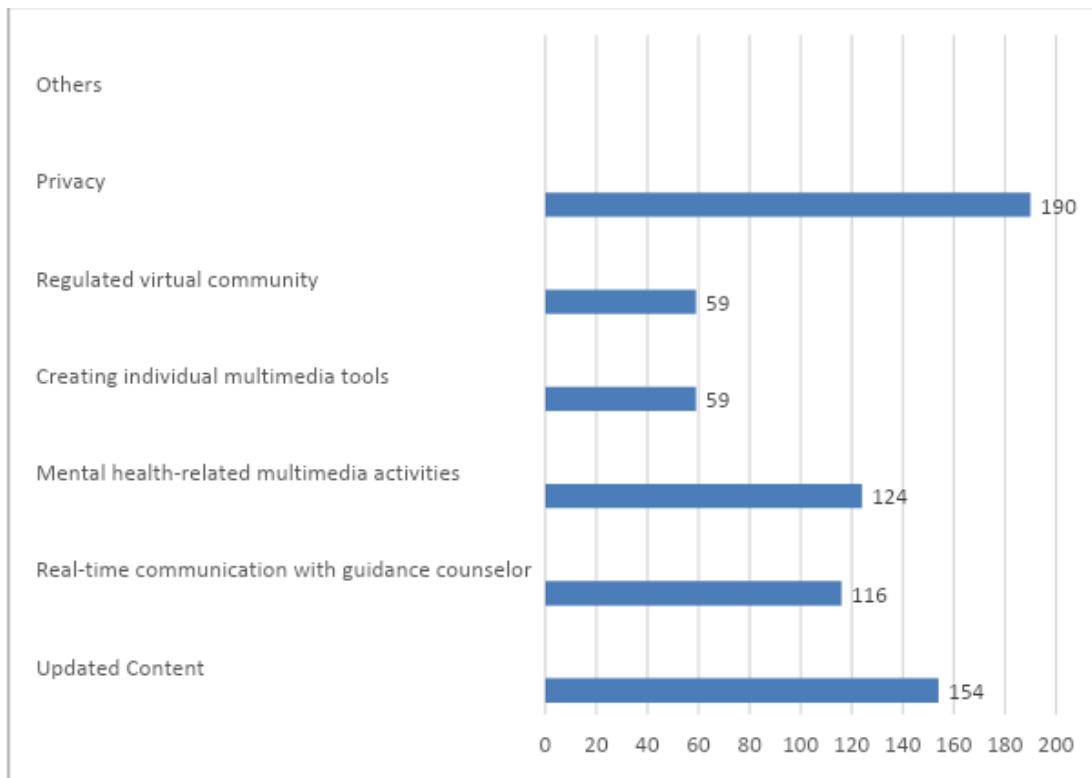
Graph 12 shows the preferred content arrangement (Appendix 6) for mental health topics. Out of 226 respondents, 127 (56.2%) selected they preferred mental health topics to be arranged in separate pods; 51 (22.6%) selected arrangement in links; and 48 (21.2%) selected in drop-down menus. No respondent specified other arrangements.

Graph 12. Preferred mental health content arrangement



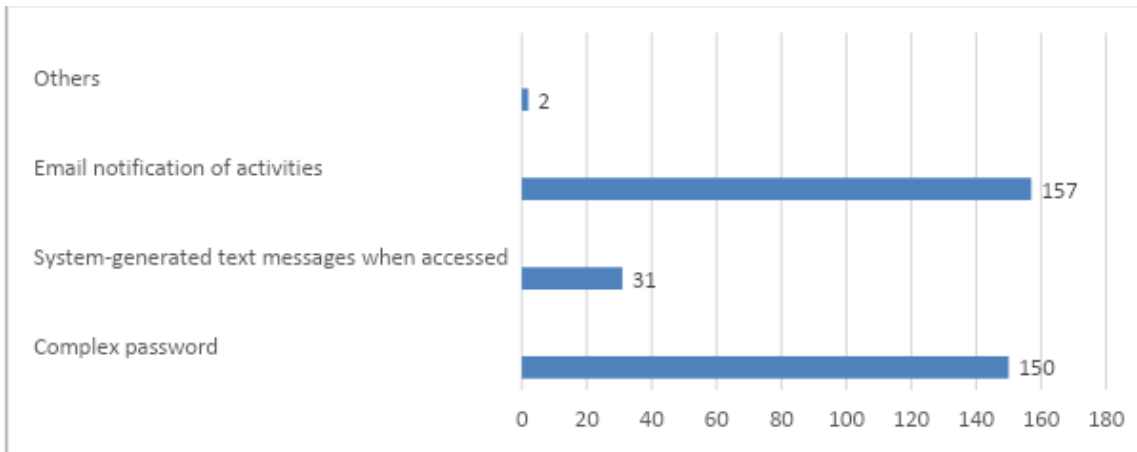
Graph 13 shows the end-user motivations for consistent network use. The respondents could select multiple answers. Out of 226 respondents, 190 (84.1%) selected *privacy*; 59 (26.1%) selected *regulated virtual community*; 59 (26.15) selected *creating individual multimedia tools*; 124 (54.9%) selected *mental health-related multimedia activities*; 116 (51.3%) selected *real-time communication with guidance counselor*; and 154 (68.1%) selected *updated content*. No respondent listed a specific motivation under *others*.

Graph 13. End-user motivations for consistent network use



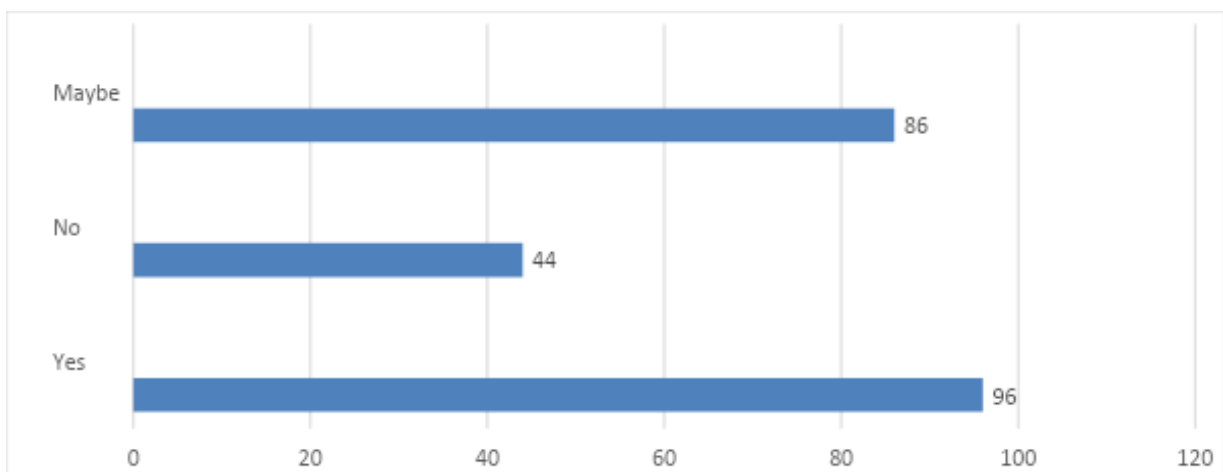
Graph 14 shows the end-user perceptions for security measures of the mental health network. The respondents could select multiple answers. Out of 226 respondents, 150(66.4%) selected *complex password*; 31 (13.7%) selected *system-generated text messages when accessed*; 157 (69.5%) selected *email notifications of activities*; and 2 (0.9%) respondents specified a security feature under *others* (website security;and two-factor authentication).

Graph 14. Network data privacy



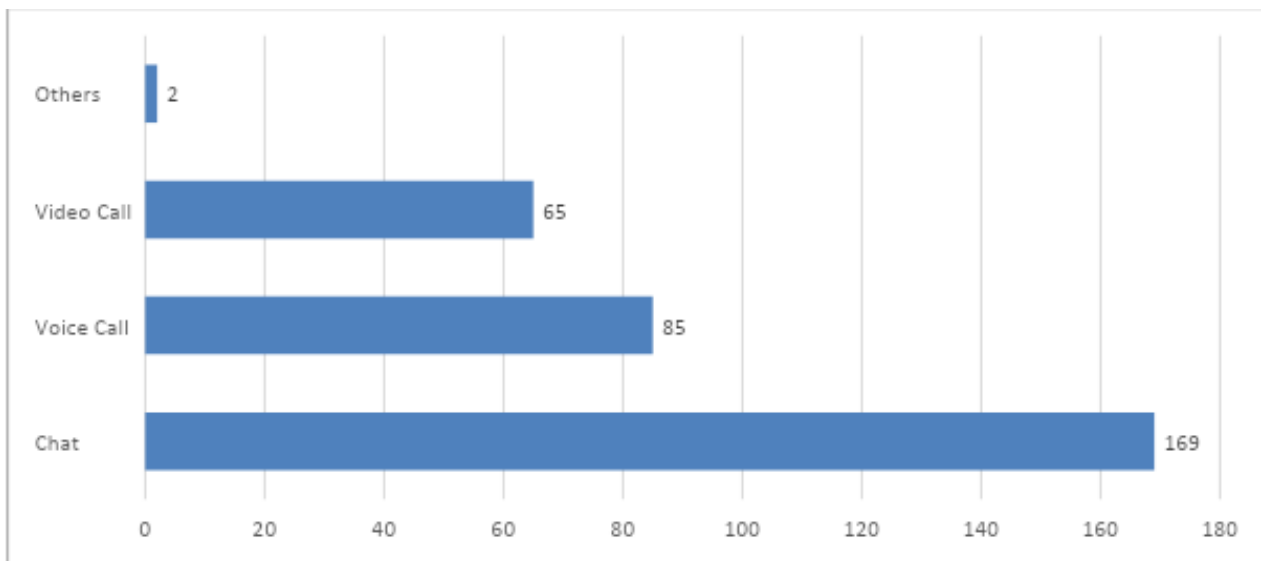
Graph 15 shows the inclinations of end-users in the intervention by a mental health expert when using the mental health network. Out of 226 respondents, 96 (42.5%) selected *yes*; 44 (19.5%) selected *no*; and 86 (38.1%) selected *maybe*.

Graph 15. Perceived inclinations for mental health intervention



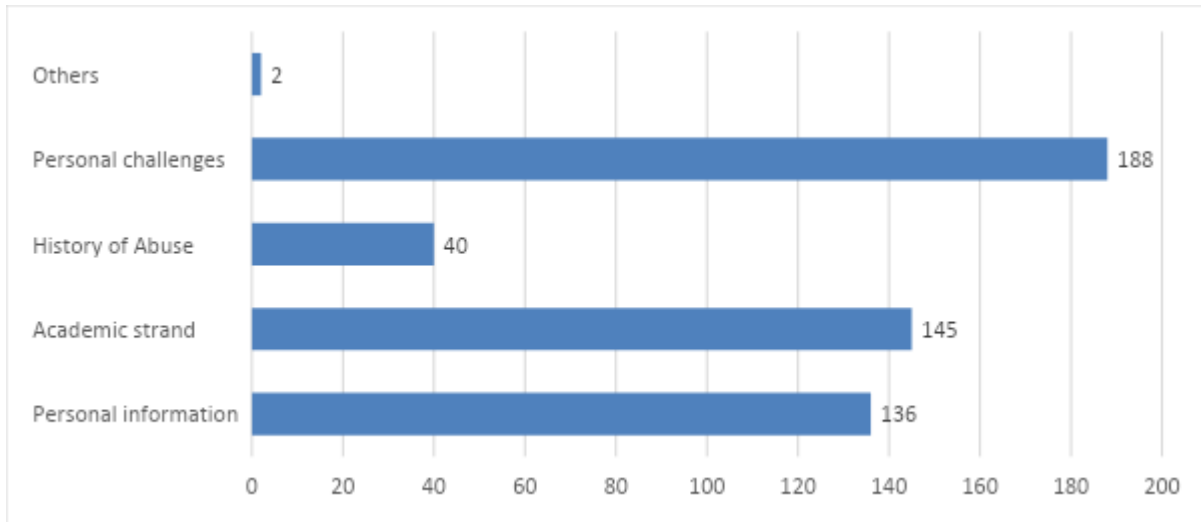
Graph 16 shows the preferred communication platforms of end-users in the intervention by a mental health expert when using the mental health network. The respondents could select multiple choices. Out of 226 respondents, 169 (74.8%) selected *chat*; 85 (37.6%) selected *voice call*; and 65 (28.8%) selected *video call*. Two (0.9%) respondents specified communication platforms under *others* (text and voice message).

Graph 16. Preferences on network communication platforms



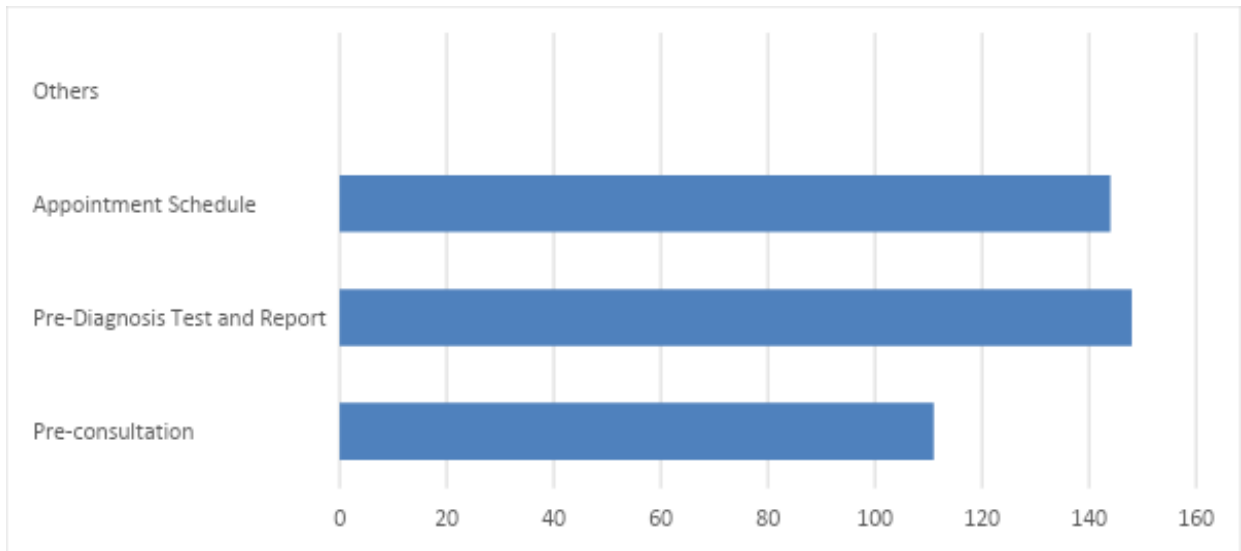
Graph 17 shows the confidential/sensitive topics that end-users are comfortable in discussing during the intervention by a mental health expert. The respondents could select multiple choices. Out of 226 respondents, 136 (60.2%) selected *personal information*; 145 (64.2%) selected *academic strand*; 40 (17.7%) selected *history of abuse*; 188 (83.2%) responded for *personal challenges*; and 2 respondents listed more topics under *others* (relationship trauma and my feelings).

Graph 17. Perceived intervention protocols



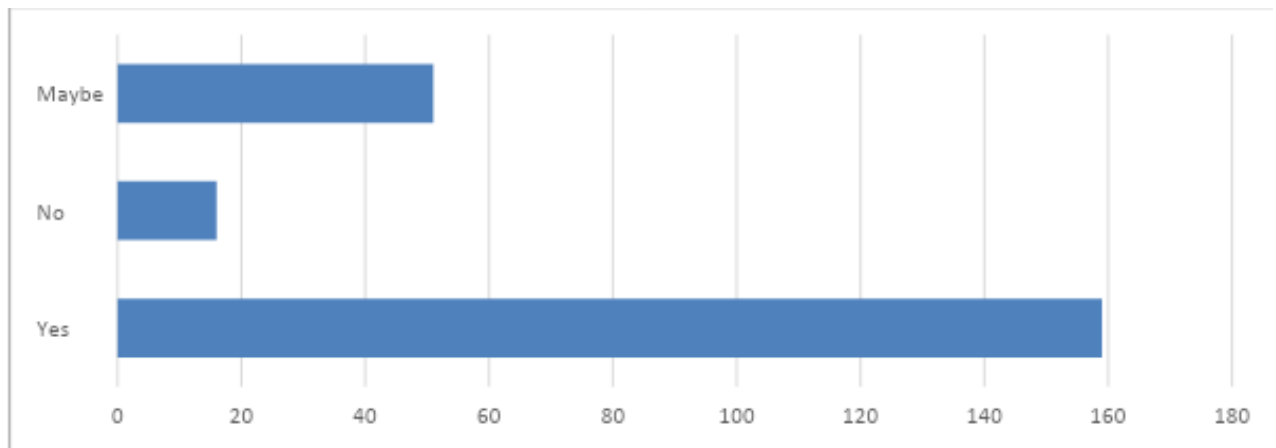
Graph 18 shows the preferred features of end-users in the intervention platform of the network. The respondents could select multiple choices. Out of 226 respondents, 111 (49.15) selected *pre-consultation*; 148 (65.5%) selected *pre-diagnosis test and report*; and 144 (63.7%) selected *appointment schedule*. No respondent listed a feature under *others*.

Graph 18. Mental health intervention features



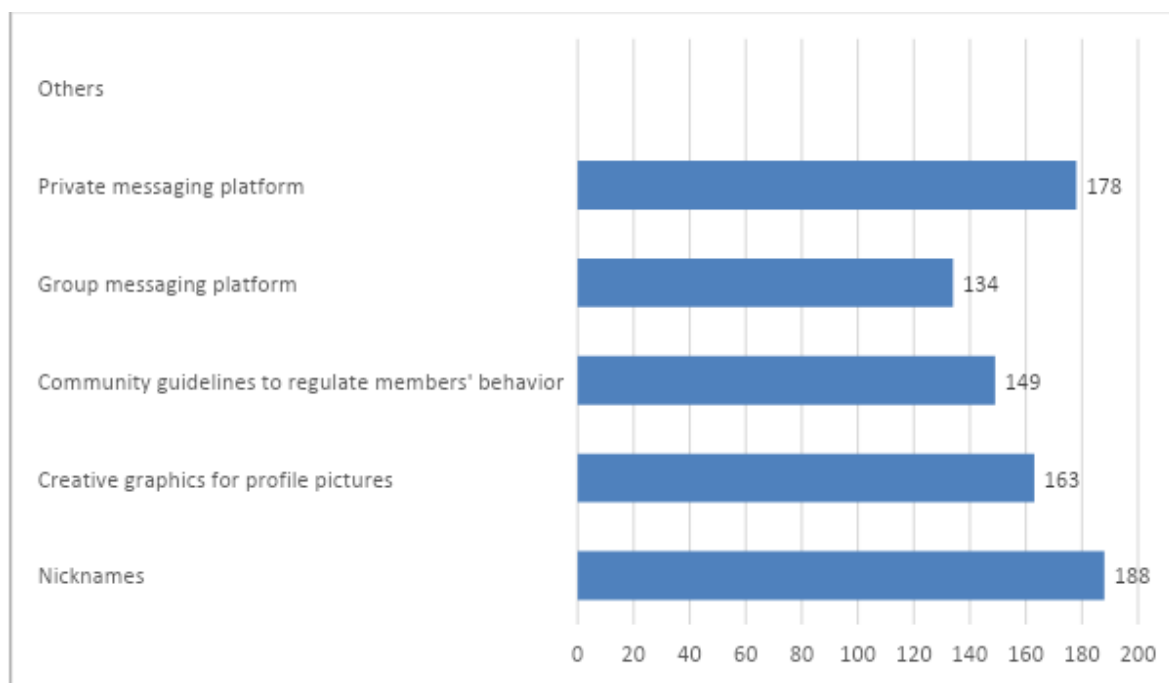
Graph 19 shows the preference of the respondents for a virtual community as a social support system. Out of 226 respondents, 159 (70.4%) selected *yes to a virtual community*, 16(7.1%) of the respondents stated *no*, and 51 (22.6%) responded *maybe*.

Graph 19. Virtual community as social support system



Graph 20 shows the features of the end-users in the virtual community of the network. The respondents could select multiple choices. Out of 226 respondents, 188 (83.2%) selected *nicknames*; 163 (72.1%) selected *creative graphics for profile pictures*; 149 (65.9%) selected *community guidelines to regulate members' behavior*; 134 (66%) selected *group messaging platform*; and 178 (78.8%) selected *Private messaging platform*. No respondent stated any other feature for a virtual community.

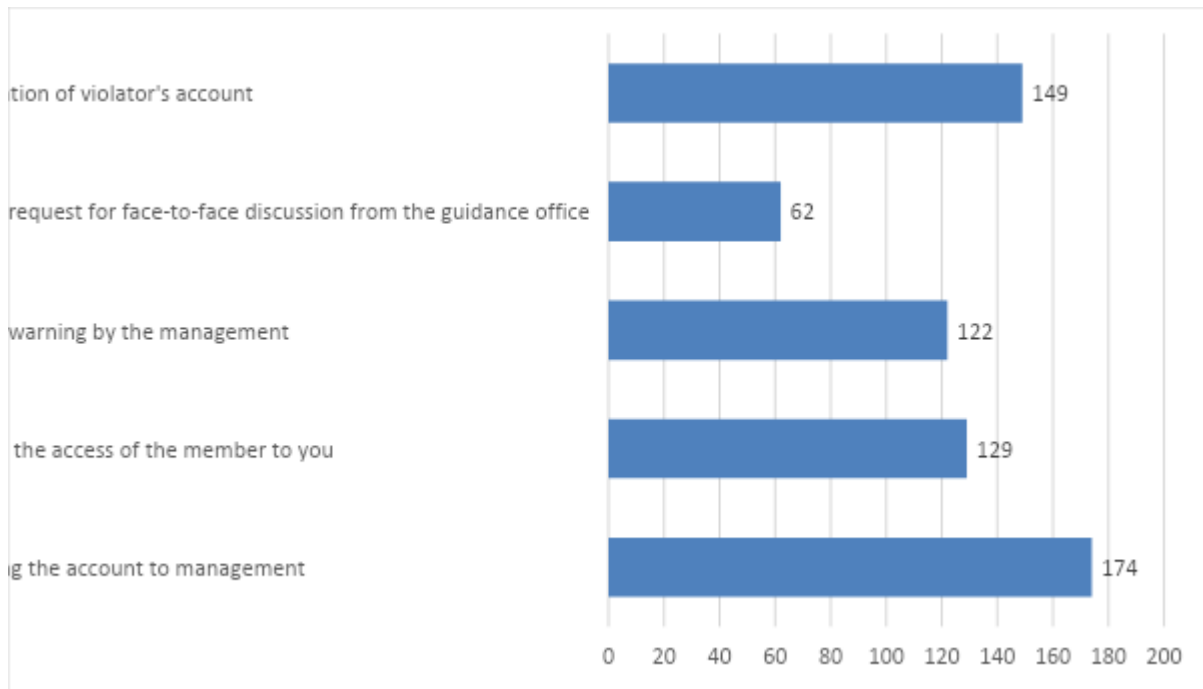
Graph 20. Virtual community features



Graph 21 shows the protocols for the guidelines violators in the virtual community of the network. The respondents could select multiple choices. Out of 226 respondents, 174 (77%) selected *reporting the account to the management*; 129 (57.1%) selected *blocking the access of the member to you*; 122 (54%) selected *written warning by the management*; 62 (27.4%) responded *written request for face-to-face discussion from the guidance office*; and 149 (66%) respondents

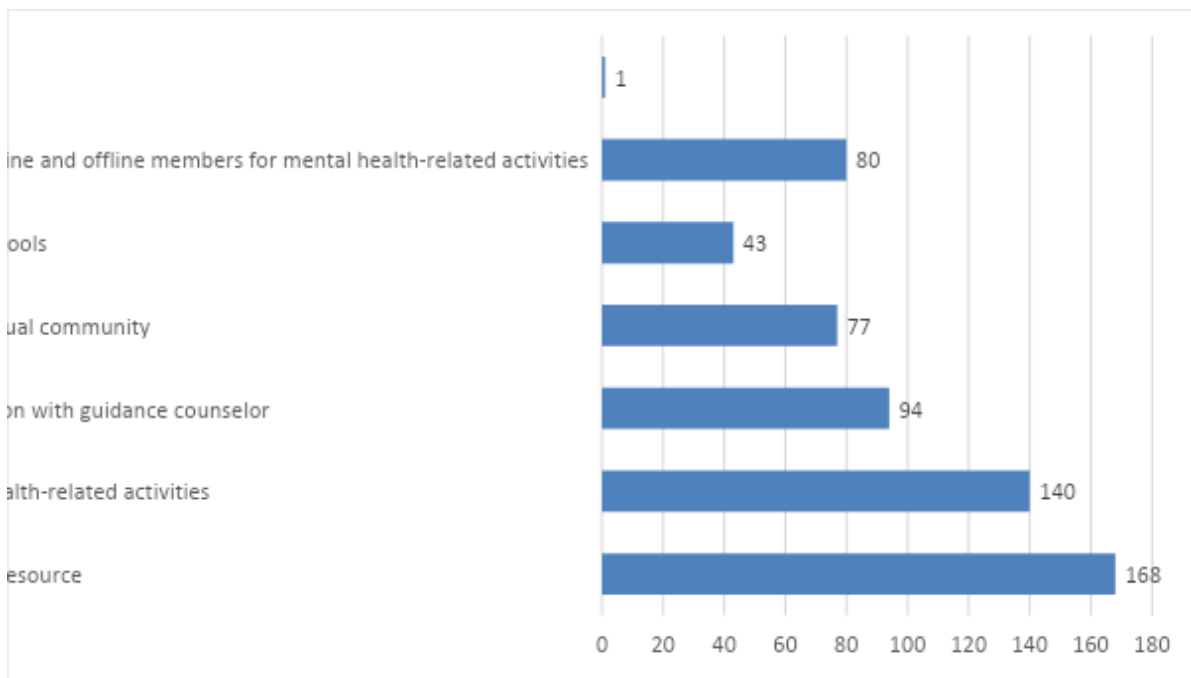
selected the *deactivation of violator's account*. No respondent listed any other guidelines.

Graph 21. Virtual community violation protocols



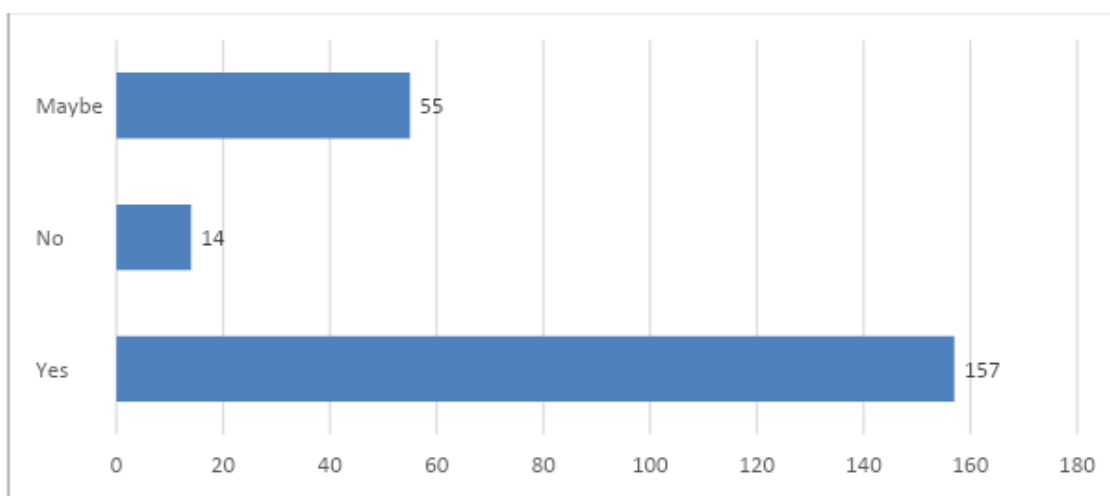
Graph 22 shows the perceptions of the end-users in the long-term purposes of the network. The respondents could select multiple choices. Out of 226 respondents, 168(74.34%) selected *credible information resources*; 140 (61.9%) selected *performing mental health-related activities*; 94 (41.6%) selected *frequent communication with guidance counselor*; 77 (34.1%) selected *connecting within virtual community*; 43 (19%) selected *creating multimedia tools*; and 80 (35.4%) selected *collaborating with online and offline members for mental health-related activities*. One (0.4%) respondent specified a purpose under *others* (improving my mental health).

Graph 22. Perceived purposes for a mental health network



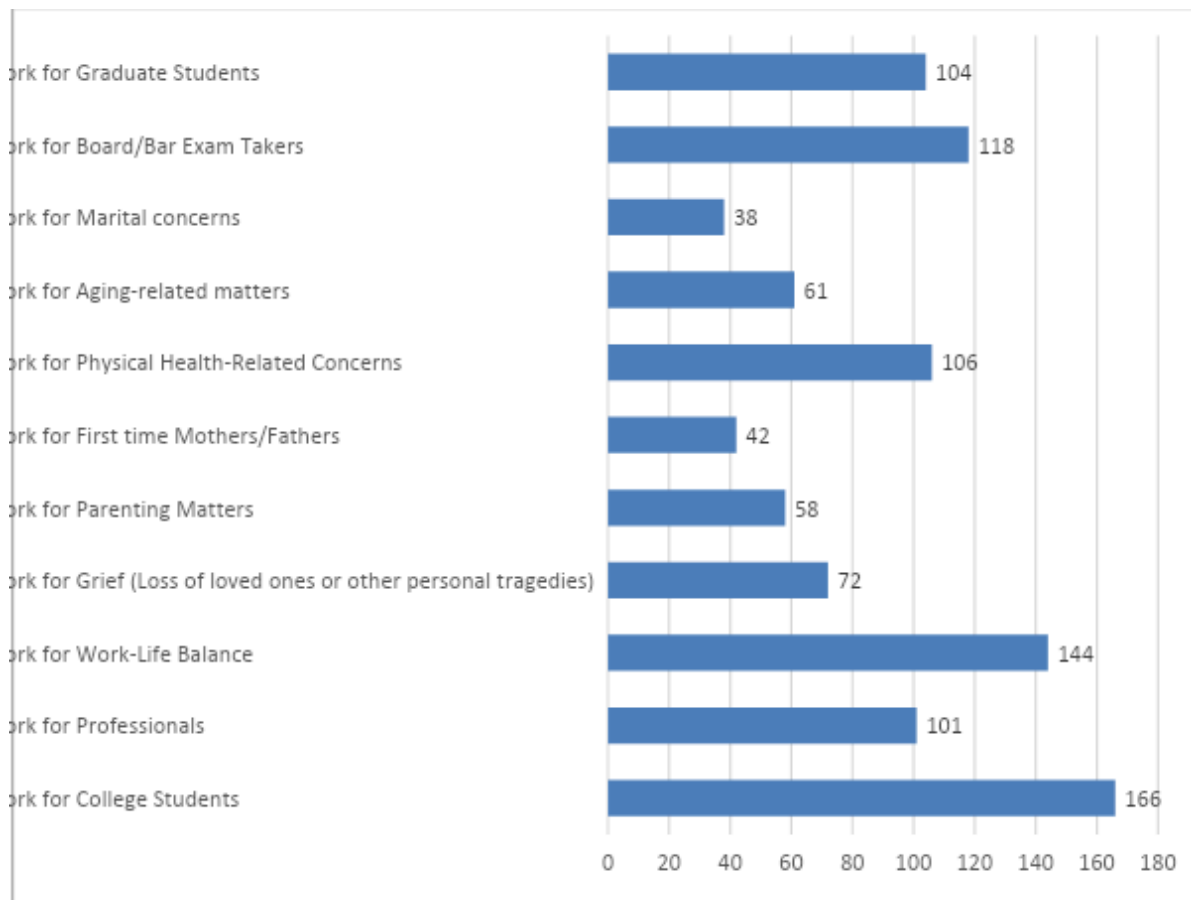
Graph 23 shows the inclinations of the respondents in using further mental health networks. Out of 226 respondents, 157 (69.5%) of the respondents answered *yes*; 14 (6.2%) of the respondents answered *no*; and 55 (24.3%) of the respondents answered *maybe*.

Graph 23. Inclinations for further mental health networks



Graph 24 shows the further possible mental health network that the respondents are likely to use in taking care of their mental health. Out of 226 respondents, 166 (73.5%) selected for *mental health network for college students*; 101 (44.7%) selected *mental health network for professionals*; 144 (63.7%) selected for *mental health network for work-life balance*; 72 (31.7%) selected for *mental health network for grief* (loss of loved ones or other personal tragedies); 58 (25.7%) selected for *mental health network for parenting matters*; 42 (18.6%) selected for *mental health network for first time mothers/fathers*; 106 (46.9%) selected for *mental health network for physical health-related concerns*; 61 (27%) selected for *mental health network for aging-related matters*; 38 (16.8%) selected for *mental health network for marital concerns*; 118 (52.2%) selected for *mental health network for board/bar exam takers*; and 104 (46%) selected for *mental health network for graduate students*.

Graph 24. Possible feasibility studies for mental health networks



**Presentation of the qualitative data**

According to the SUSH Guidance counselor, there have been reports of mental health–related concerns such as anxiety brought by the ODL especially since routines have changed due to COVID-19 when face-to-face interactions were restricted. Because of ODL, the Senior High Career Advocacy & Guidance & Counseling Office has offered e-counseling through a virtual office support in the mySoul platform. The SOUL specialist stated that virtual offices for mySoul platform (Appendix 12) have already been created from early childhood to graduate school. These virtual offices could host webinars and facilitate communication platforms.

The SUSH Principal stated that since the onset of ODL, virtual guidance counseling has already been implemented but then conducting guidance counseling

online is still new for the department. The SUSH Governor stated that the ODL is an unfamiliar stage for senior high school students and, oftentimes, their mental health concerns are overlooked especially that they needed to adjust their routines to studying at home.

The discussion with the mental health care state in SUSH could be read in Table 6.

Discussion on the Mental Health Care State in SUSH	
Position	Answers
<b>Senior High School (SUSH) Guidance Counselor</b>	<p>Because of the pandemic, our routines during the face-to-face time were disrupted due to curfew, isolation, and quarantine. We have now adopted virtual learning strategies such as the Online Distance Learning (ODL). When ODL started, we have received reports of anxiety because of panic attacks such as delay in submitting assignments and reports in the online learning platform, rejections from peer groups when messages don't get replied in chat platforms, and pressure in achieving academic honors.</p> <p>We introduced a lot of programs to students for their well-being such as e-counseling between parent and student along with our career development program. This e-counseling platform has been integrated in the SOUL Platform.</p>
<b>Silliman Online University Learning (SOUL) Specialist</b>	<p>The SOUL platform has created virtual support offices for the Guidance and Testing Division from childhood to graduate programs since 2020. The virtual support offices host webinars and facilitate a communication platform.</p>
<b>Silliman University Senior High (SUSH) Principal</b>	<p>Even before the COVID-19 pandemic, there have been mental health-related concerns. The Senior High Career Advocacy &amp; Guidance &amp; Counseling Office implemented programs such as counseling to students who were referred to the office. Right now, there are virtual support offices to continue the counseling sessions online. Despite this development, Conducting guidance counseling online is new to us.</p>
<b>Silliman University Senior High (SUSH) Student Government Governor</b>	<p>We are in an unfamiliar stage in senior high school because of the online classes. Oftentimes, our mental health concerns are overlooked. Our day to day lives have been filled with the ODL routine while cooped up within the four walls of our homes.</p>

Table 6. Discussion on the mental health care state in SUSH

According to the SUSH guidance counselor, the mental health communication program could help students develop coping mechanisms especially that many factors during the pandemic such as exposure to news could cause mild depression, but certain features such as privacy should be ensured. The SOUL specialist stated that a clear vision for the program should be presented before its development if there is intent for the mental health communication network that would be integrated with SOUL. He explained that due to the limited space of the SOUL platform, content could be accessed through third-party domains. Communication features such as private messaging is also feasible with the platform if the mental health network would be integrated with SOUL.

The SUSH principal stated that the mental health network could minimize stigma surrounding mental health. He said that the content on stress and time management is helpful for students. He stated that there is no guarantee how the program would work, but then, he stated that it would be feasible if it is integrated with the institution and in the SOUL platform. The SUSH governor stated that the network could raise awareness with mental health issues, provide insights regarding mental health, and could develop empathy among students. Please see Table 7 for the discussion.

Perceptions on the feasibility of the Mental Health Communication Network in SUSH	
Position	Answers
<b>Senior High School (SUSH) Guidance Counselor</b>	<p>Mental health care is important especially now that we are isolated from our face-to-face routines. Hopelessness is also rampant. We are social beings but our interaction is now limited.</p> <p>Learning about mental health care is relevant especially now that many factors such as the news could cause mild depression.</p> <p>I think the program could help in the coping mechanisms of students, but then, features such as privacy should be ensured in the development of the program. His network could be useful because we still need to learn soft skills in life.</p>
<b>Silliman Online University Learning (SOUL) Specialist</b>	<p>The mental health communication network could be hosted by the SOUL platform as long as there is a clear vision for the development of the program. When the vision is laid out, the offices could request for the creation of the virtual support office.</p> <p>There are limits to the allowed space of the virtual platform, so mostly contents are hosted by third-party domains such as websites and Google drives. These content are accessible through links.</p> <p>Communication between parties is also feasible since there is a private messaging feature for every virtual support office.</p> <p>When it comes to the network being adopted to a mobile application, it is possible. The end-users could access features such as viewing of videos.</p>
<b>Silliman University Senior High (SUSH) Principal</b>	<p>The program is a welcome development to senior high school students especially when it comes to minimizing stigma about mental health. I find the features such as time management and stress management helpful for the students. Most students these days are experiencing stress especially when it comes to submitting paperworks.</p> <p>We don't know how this would work yet or if it would work at all. I suggest that it would be good if it would be part of the institution and that the program would be integrated with SOUL.</p>
<b>Silliman University Senior High (SUSH) Student Government Governor</b>	<p>The mental health network could be good for raising awareness about mental health issues. It could also develop empathy among students especially that mental health issues are stigmatized.</p> <p>I think this mental health network could provide students with insights regarding mental health care.</p>

Table 7. Discussion on Perceptions on the feasibility of the Mental Health Communication Network in SUS

According to the SUSH Guidance Counselor, the Senior High Career Advocacy & Guidance & Counseling Office would promote the mental health communication program to all the platforms accessible especially since their office is already maximizing its services through various platforms. The SOUL specialist guaranteed that the SOUL Support Office would be willing to assist in the virtual training of the guidance office personnel and student through zoom conferences.

The SUSH principal would support the program by integrating the purposes of the mental health communication network to students who might need to use the network. He stated that collaboration with teachers in using the network would be efficient in the promotion of the network. The SUSH governor guaranteed that as a direct access to the student body, the student government would be significant in the promotion of the mental health communication network. Please see Table 8 for the discussion.

Discussion on Support of the Experts of the Mental Health Communication Network in SUSH	
Position	Answers
<b>Senior High School (SUSH) Guidance Counselor</b>	If the network is developed, we would try our best to spread about it in many ways especially with using technology. Right now, we address and maximize our services to more people through every accessible platform.
<b>Silliman Online University Learning Specialist (SOUL)</b>	Our SOUL office has four support teams: Information and Quality Support, Technology and Development Support, Training and Users Support, and Educational Technology Support. When this technology is developed, we are willing to assist in the virtual training to students and the guidance personnel through zoom conferences.

<b>Silliman University Senior High (SUSH) Principal</b>	To efficiently implement the program, the network could be integrated through the teachers' recommendations. It would be efficient if, for example, I could recommend a student to use the network whom I've observed to be going through challenges.
<b>Silliman University Senior High (SUSH) Student Government Governor</b>	The senior high government could raise awareness about the development of the program especially since we are a direct access to the student body. We could connect the students to this network especially for those who need it the most.

Table 8. Discussion on Support of the Experts of the Mental Health Communication Network in SUSH

According to SUSH guidance counselor, she could see that the guarantee of the active participation, connectivity issues, and resistance to the program would be the challenges in the development of the network. The SOUL Specialist stated that the lack of clear vision of the programs' functions, lack of proper orientation, resistance to using modern technology, and wrong or expired links to third-party domains would be the challenges in the development of the program.

The SUSH principal stated that he had foreseen the confusion of requiring students to use the program amid their access to multiple virtual services already and the cost-effectiveness of the program itself. The SUSH governor had foreseen that there will be challenges when it comes to video conferencing if it is not improved,

connectivity issues, limited access to students because of its virtual nature, and lack of gadgets. Please see Table 9 for the discussion.

Table 9. Perceived challenges of the mental health communication network in SUSH

Perceived Challenges of the Mental Health Communication Network in SUSH	
Position	Answers
<b>Senior High School (SUSH) Guidance Counselor</b>	<p>One challenge I could foresee is the active participation of the students. The passive involvement of the students in programs is still a challenge even before the pandemic where students would merely attend convocations and forums for the sake of being required by their teachers.</p> <p>I could also foresee connectivity issues when it comes to the implementation of the program. Aside from it, there might be those who would be resistance to it.</p>
<b>Silliman Online University Learning (SOUL) Specialist</b>	<p>I could foresee that if there is no clear vision of the program's functions and if there's no proper orientation, then there will be challenges for both the staff and the students.</p> <p>I urge everyone to adopt to the modern technologies because if there's resistance, then it would cause the delay of the program.</p> <p>I could also foresee that the staff should cultivate the value of patience when it comes to facilitating the communication support.</p> <p>Lastly, I would just like to encourage that the links to the mental health network must be updated, active, and correct.</p>
<b>Silliman University Senior High (SUSH) Principal</b>	<p>It would be confusing if it would be required to use or not especially since the students are accessing many virtual services already. It would be a challenge too if it would be paid or not. If it would be integrated with SOUL, then it would be cost-effective.</p>
<b>Silliman University Senior High (SUSH) Student Government Governor</b>	<p>Features for video conferencing could be improved. There is also limited access, problems with lack of gadgets, and the stability of Wi-Fi.</p>

According to the SUSH Guidance Counselor, mental health caravans should be conducted to promote the mental health communication program. She also suggested that the network should be integrated with various academic subjects not only in Personal Development and Christian Formation subjects. The SOUL

7specialist suggested that proper virtual orientation and training among the staff and end-users should be required, so everyone could learn the dynamics of the LMS.

The SUSH principal suggested that there should be a host who will manage the network and a credible operator for the chat support program. He also suggested that it should be accessible and have a user-friendly interface. The SUSH governor suggested that confidentiality with the private messaging platform should be ensured and that there should be credible and empathetic chat operators especially that people could be unpredictable. Please see Table 10 for the discussion.

Suggestions for the development and implementation of the Mental Health Communication Network in SUSH	
Position	Answers

<p><b>Senior High School (SUSH) Guidance Counselor</b></p>	<p>There should be a mental health caravan for spreading awareness of the development of the network.</p> <p>Aside from the mental health caravan, I suggest that the network could be introduced and integrated into the academic subjects and not just in Personal Development subjects or in the Christian Formation subjects.</p>
<p><b>Silliman Online University Learning (SOUL) Specialist</b></p>	<p>I suggest that proper virtual training such as webinars should be requested and be required for the staff and students to learn the dynamics of the Learning Management System (LMS).</p>
<p><b>Silliman University Senior High (SUSH) Principal</b></p>	<p>There should be a host that will manage the network especially with the chat support program.</p> <p>It should be accessible and have a user-friendly interface.</p>
<p><b>Silliman University Senior High (SUSH) Student Government Governor</b></p>	<p>Confidentiality with the private messaging platform should be ensured and that there should be credible and empathetic chat operators especially that people could be unpredictable.</p>

*Table 10. Suggestions for the development and implementation of the mental health communication network in SUSH*

## Chapter V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

## Summary

This study aims to provide an online mental health literacy model for the development and implementation of a mental health communication network accessible through a mobile application for senior high students in SU. The researcher recognized the need for senior high school students to take care of their mental health and to develop coping strategies amid challenges such as academic pressure, familial issues, and other matters.

The network has two main functions, which are mental health literacy by educating senior high school students and mental health intervention by an expert through a communication platform. The network would provide credible mental health content in various multimedia forms, and it would develop a communication platform to facilitate conversations between the SUSH guidance counselor and the students.

Because there is no existing mental health communication network in SU when the study is being conducted, the study uses an exploratory–descriptive research design and used mixed methods in obtaining quantitative and qualitative data.

The researcher submitted a proposal for a review by the UREC for ethical review. Upon the approval of the proposal, the researcher sought permission from the SUSH principal to conduct the study in the department because the respondents in the study include senior high school students who will answer the questionnaires needed to obtain quantitative data.

The study used Slovin's formula to obtain a desired sample population from the total population with a 95% confidence level. The stratified sampling technique has also been used to ensure that certain subgroups from the total population would be represented. These subgroups in the study include the four strands in SUSH such as the STEAM, ABM, HUMMS, and Arts and Design track.

The researcher collaborated with subject teachers, so the latter could distribute it to the respondents. Due to the mobility restrictions brought by the health protocols to mitigate COVID-19 transmission, the surveys have only been distributed through Google Forms. Interviews with the experts were also conducted through Google Meet.

However, the researcher wasn't able to yield responses to reach the desired sample size, so to validate the number of responses if it will still be acceptable in the 95% confidence level, the MOE equation is used. The result yielded a 5% or 95% confidence level.

The researcher tallied, graphed, and interpreted the results from the survey, which are presented in the Presentation, Analysis, and Interpretation of Data.

To gather qualitative data to yield answers for the development and implementation of the mental health network, the researcher used the expert sampling to determine the people in the university who would be interviewed. The type of interview used in the study is the Unstructured-Direct Interview where

open-ended questions were asked and the respondents could elaborate their perceptions further.

The authorities/experts who were interviewed for the development of the program were the guidance counselor of the Senior High Career Advocacy & Guidance & Counseling Office and the SOUL expert.

The Guidance Counselor is the authority in the selection, organization, and presentation of the mental health content in the network. She is also the authority in facilitating the communication platform in the network. The SOUL specialist is an expert in the technical development of the program such as developing the interface, integrating third-party domains, and developing the communication platform.

The interviewees for the implementation of the program include the SUSH principal who will review, approve, and support the development and implementation of the program. He is also the authority who will endorse the program's purpose to the senior high school faculty and to the senior high school government.

The SUSH governor was also interviewed because she is the main representative of the SUSH student government. She has the direct access to conveniently mobilize senior high school students in using the network.

The qualitative data were organized and interpreted in a tabular format after the presentation of the quantitative data. The quantitative and qualitative data were presented in the Presentation, Analysis, and Interpretation of Data.

In this chapter, conclusions are determined, and recommendations are formulated.

## **Conclusions**

This study aims to provide a design for a mental health communication network accessible through a mobile application for senior high students in SU. In this regard, the conclusions are as follows:

- Senior high school students perceive mental health care as very important. They are willing to use a mental health network as long as it is convenient and private, they could perform health-related activities, the content is updated, and that they could communicate to their guidance counselor.
- The mental health contents that the senior high school students find relevant are about Stress Management, Anxiety Management, Time Management, Proper Sleep Management, Self-Esteem Development, Developing a Motivated Mindset, Coping Mechanisms to Manage Depression, Anger Management, Overcoming Eating Disorders, and Managing Internet Use.
- Senior high school students preferred the English language to be used in the network; the content must be presented in infographics, video, and scientific studies; and that the mental health contents would be arranged in separated pods (Appendix 6).

- Senior high school students are willing to communicate with their guidance counselor through chat. They are willing to share and discuss their personal challenges, and they find the pre-diagnosis test and report as a significant feature in mental health expert intervention.
- Majority of the senior high school students prefer a virtual community. The preferred features of the virtual community support include nicknames, creative graphics for profile pictures, community guidelines to regular members' behavior, group messaging platform, and private messaging platform. When it comes to the protocols for the guidelines violators in the virtual community of the network, majority selected reporting the account to the management and selected blocking the access of the member to you.
- The SOUL platform could accommodate the network as long as there's a clear vision that the IT specialists could work on. The experts/authorities in senior high school would support the program by spreading information about its purposes through all available platforms possible, conduct of proper training by the SOUL staff, and integration of the network in the academic subjects.
- The network should be developed with a user-friendly interface, and the host and chat support staff must be patient and accommodating.

### **Recommendations**

Based on the conclusions of the study, these are the recommendations:

- Proper orientation and training conducted by the SOUL Training Support Team for the staff of the Senior High Career Advocacy & Guidance & Counseling Office and the senior high school students must be required.
- There should be credible chat support who will be the operator of the communication platform. Further, there must be a moderator for the virtual community.
- Monitoring and evaluation of the network's relevance and efficiency must be annually conducted by the Senior High Career Advocacy & Guidance & Counseling Office by administering questionnaires to the senior high school students.
- Further feasibility studies on mental health communication networks for college students, work-life balance, and professionals could be conducted.

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## Appendices

# APPENDIX A

## SU UREC Clearance



UNIVERSITY RESEARCH ETHICS COMMITTEE  
 SILLIMAN UNIVERSITY  
 6200 Dumaguete City  
 Philippines

Sub-Committee Review  
 July 5, 2021

<b>Principal Investigator</b>	Royanni Miel M. Hontucan		
<b>Date Submitted:</b>	April 5, 2021	<b>Department</b>	GRAD SCHOOL MA in DEVELOPMENT COMMUNICATION
<b>Semester:</b>	2 <sup>nd</sup> Semester 2020-2021		
<b>Research Title</b>	DESIGN FOR A MENTAL HEALTH COMMUNICATION NETWORK FOR SENIOR HIGH SCHOOL STUDENTS		
<b>Meeting Date</b>	June 28, 2021 July 2, 2021	<b>Venue:</b> UREC Office	
<b>Sub-Committee Members</b>	Dr. Karl James E. Villarnea Dr. Theorose June Q. Bustillo Dr. Kim G. Sarong		

<input type="checkbox"/>	<b>Full Review Sub-committee</b>	<input checked="" type="checkbox"/>	<b>Approved</b>	<input type="checkbox"/>	<b>Non-Coverage</b>
<input checked="" type="checkbox"/>	<b>Expedited Review</b>	<input type="checkbox"/>	<b>Deferred</b>		

SEE ATTACHED

This is to certify that the Ethics Committee has reviewed the proposal.

	Dr. Karl James E. Villarnea	July 5, 2021
	<b>Print Name &amp; Signature</b>	<b>Date</b>

/file

# APPENDIX B

## SUSH Population



seniorhigh SU

to me ▾

Hi Ma'am,

Sorry for the delay. But here is the breakdown per strand:

*Grade 11*

ABM 102

HUMSS 63

ARTS 29

STEAM 574

To be sorted 6

Total: 774

*Grade 12*

ABM 58

HUMSS 62

ARTS 25

STEAM 585

To be sorted 38

Total: 768

Overall total: 1542

--

**Lecah Sarming**

Staff/LIS Coordinator, Senior High School

Silliman University

(035) 422-6002 Local 426

## APPENDIX C Respondents' Survey



Open University  
University of the Philippines  
S.Y. \_\_\_ to \_\_\_

Date: \_\_\_/\_\_\_/20\_\_\_

Dear respondent,

I, the undersigned, is taking Master of Development Communication from the University of the Philippines Los Baños (Open University). In this connection, I am conducting a research study entitled *Design for Mental Health Communication Network for Senior High School Students*.

This communication network is named as 2lk2Me and is designed to be private, accessible, and safe based on the needs of senior high school students in Silliman University (SU).

This mental health network is a needed intervention for guiding students in taking care of their mental health by providing them with an access to reliable mental health care resources such as articles, videos, and journal-related activities.

Aside from the access to mental health resources, the network is also designed to provide a convenient and private communication platform between you and your guidance counselor where you could seek for help and guidance in taking care of your mental health in the most private and most convenient means possible.

When this communication network is developed, you could download it through your mobile phones and connect to your university's Wi-Fi to access and use the network.

If this mobile application is developed in the university, data privacy is ensured in collaboration with the College of Computer Sciences (CCS).

When it comes to anonymity, you will be asked to set up your profile with your real information but it is only accessible to your guidance counselor but your identity will appear as anonymous or how you want it to be when you using the network. You could also disengage any time if you already uncomfortable.

In this regard, I am seeking for your valuable cooperation by answering this questionnaire.

### REMINDER:

Experiencing mental health issues is important, and help is available for those who need it.

If you need help, you can visit the senior high school guidance office or you can contact your guidance counselor:

Analyn L .Gio  
Senior High School  
[Analgio@su.edu.ph](mailto:Analgio@su.edu.ph)  
[shguidance@su.edu.ph](mailto:shguidance@su.edu.ph)

The collected information will be intended for research purposes and publication but treated with utmost confidentiality. Thank you so much!

Sincerely yours,

RoyanniMiel M. Hontucan  
[rmhontucan@up.edu.ph](mailto:rmhontucan@up.edu.ph)

Before you proceed, please read and check:

\_\_\_I understand that this study deals with the sensitive topic of mental health. I acknowledge that I have been fully

informed of the study's relevance and that I fully understand the expectations and the benefits from it. I acknowledge that I have been provided with contact information of my guidance counselor for whatever purpose it may serve me in connection with my participation in the study. I also acknowledge that I could also engage any time if I already feel uncomfortable. I consent to the publication of the results from this study.

Name: \_\_\_\_\_

Sex: \_\_\_M\_\_\_F

Grade: \_\_\_

Strand:

\_\_\_ Science, Technology, Engineering, Agriculture, Agriculture, Math (STEAM)

\_\_\_ Accountancy, Business, and Math (ABM)

\_\_\_ Humanities and Social Sciences (HUMMS)

\_\_\_ ARTS & DESIGN

Please answer the following items:

1. How likely are you to want to learn about mental health?

- a. Highly likely
- b. Most likely
- c. Moderately likely
- d. Least Likely
- e. Not Likely

2. How important is taking care of mental health for you?

- a. Very important
- b. Important
- c. Somewhat Important
- d. A little bit important
- e. Not important at all

3. Why do you think taking care of mental health care is necessary? (***you may check more than one***)

\_\_\_ To handle stress better

\_\_\_ To be able to manage overwhelming emotions

\_\_\_ To correct negative/overwhelming thinking patterns

\_\_\_ To become more effective in performing tasks

\_\_\_ To improve my relationships

\_\_\_ To be develop resiliency amid problems

\_\_\_ Others, \_\_\_\_\_ please specify: \_\_\_\_\_

4. What do you think of a mental health network as a mobile phone application? (***you may check more than one***)

\_\_\_ It is accessible because I can connect to it anytime

\_\_\_ It is convenient because I can seek resources and assistance anywhere

\_\_\_ It is private because it is designed for individual use

\_\_\_ It is a safe platform for me to communicate with my guidance counselor

\_\_\_ It is informative when it comes to learning about mental health issues

\_\_\_ It is helpful in improving my mental health care

\_\_\_ Others, \_\_\_\_\_ please specify: \_\_\_\_\_

5. What are the mental health issues that you'd want to learn about? (***you may check more than one***)

\_\_\_ Stress management

\_\_\_ Anxiety management

\_\_\_ Anger management

\_\_\_ Overcoming eating disorders

\_\_\_ Proper Sleep Management

\_\_\_ Developing self-esteem

\_\_\_ Recovery from bullying experiences

\_\_\_ Overcoming Loneliness

\_\_\_ Coping Mechanisms amid Depression

\_\_\_ Coping Mechanisms amid parental separation

\_\_\_ Self-acceptance when it comes to gender orientation

\_\_\_ Developing a Motivated Mindset

\_\_\_ Improving social skills

\_\_\_ Time Management

\_\_\_ Self-esteem development

\_\_\_ Social Media Use Management

\_\_\_ Video Game Time Management

\_\_\_ Grief, pls. specify: \_\_\_\_\_

\_\_\_ Others, pls. specify: \_\_\_\_\_

6. What is your preferred language for a mental health network? (**you may check more than one**)

\_\_\_ Cebuano

\_\_\_ Filipino

\_\_\_ English

7. How do you prefer mental health content to be presented? (**you may check more than one**)

\_\_\_ News

\_\_\_ Feature articles

\_\_\_ Infographics

\_\_\_ Videos

\_\_\_ Podcasts

\_\_\_ E-books

\_\_\_ Short minute Tiktok-type videos

\_\_\_ Scientific studies

\_\_\_ Others, please specify: \_\_\_\_\_

8. What features of a mental health network do you think could help you take care of your mental health? (**you may check more than one**)

\_\_\_ Journaling guides

\_\_\_ Motivational videos

\_\_\_ Social media community

\_\_\_ Arts and Crafts Therapeutic activities/exercises

\_\_\_ Physical fitness guides

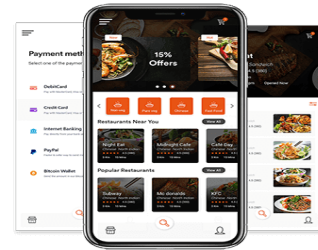
\_\_\_ Sleeping manuals/guides

\_\_\_ Music therapy guides

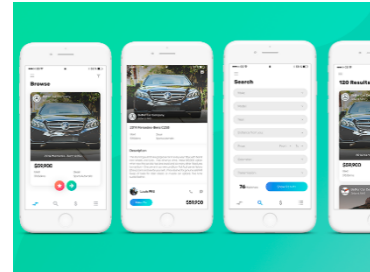
\_\_\_ Others, please specify: \_\_\_\_\_

9. How do you want the mental health content be arranged?

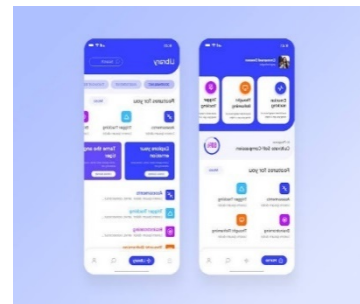
a. In separate pods



b. In links



c. Drop-down menus



d. Others, please specify: \_\_\_\_\_

10. What would motivate you in using the network? (**you may check more than one**)

\_\_\_ Updated content

\_\_\_ Real-time communication with guidance counselor

\_\_\_ Various mental health-related multimedia activities

\_\_\_ Opportunity to create my own multimedia tools related to mental health

\_\_\_ Courteous virtual community

\_\_\_ As long as my privacy is ensured

\_\_\_ Others, please

specify: \_\_\_\_\_

11. Select the security features you prefer in keeping your data secured (**you may check more than one**)

- Complex Password
- System-generated text messages when accessed
- Email-notifications of activities
- Others, please specify: \_\_\_\_\_

12. Are you willing to talk to your guidance counselor online regarding your mental health?

- a. Yes
- b. No
- c. Maybe

13. Talking to your guidance counselor is encouraged and highly accessible through the network. If you needed to, how would you like to talk to your guidance counselor online? (**you may check more than one**)

- Chat
- Voice call
- Video call
- Others, please specify: \_\_\_\_\_

14. What information about yourself will you be comfortable sharing to your guidance counselor, provided that, the information you share is treated with utmost confidentiality? (**you may check more than one**)

- Name
- STRAND
- History of abuse
- Personal challenges
- Others, please specify: \_\_\_\_\_

15. Select the virtual features you'd want to incorporate in the network when it comes to mental health expert intervention. (**you may check more than one**)

- Appointment schedule for face-to-face consultation
- Pre-Diagnosis Test and Report

- Pre-Consultation before scheduled face-to-face appointments
- Others, please specify: \_\_\_\_\_

16. Do you think that a virtual community as a support social system should be established in the network?

- a. Yes
- b. No
- c. Maybe

17. Select your preferred features for a virtual community (**you may check more than one**)

- Nicknames
- Cartoon/Creative Graphics for profile pictures
- Community guidelines to guarantee courteous speech
- Group Messaging Platform
- Private Messaging Platform
- Others, please specify: \_\_\_\_\_

18. If a member of the virtual community violates community guidelines, select the preferred options for actions. (**you may check more than one**)

- Reporting the account to management/guidance counselor
- Blocking the access of the member to you
- Written warning by the management sent to member's private message and university email
- Written request for face-to-face discussion from the guidance office issued to the violator
- Deactivation of account if member continues to violate community guidelines after investigation
- Others, please specify: \_\_\_\_\_

19. If the network is developed, it would only cater to enrolled senior high school students in the university. Would you prefer to continue using a mental health communication network even beyond senior high school?

a. Yes

b. No

c. Maybe

21. What could be the mental health networks that you think could help you take care of your mental health?

Mental Health Network for College students

Mental Health Network for Professionals

Mental Health Network for Work-Life Balance

Mental Health Network for Grief (Loss of loved ones or other personal tragedies)

Mental Health Network for Parenting Matters

Mental Health Network for First time Mothers/Fathers

Mental Health Network for Physical Health-Related Concerns

Mental Health Network for Aging-related matters

Mental Health Network for Marital concerns

Mental Health Network for Board/Bar Exam Takers

Mental Health Network for Graduate Students

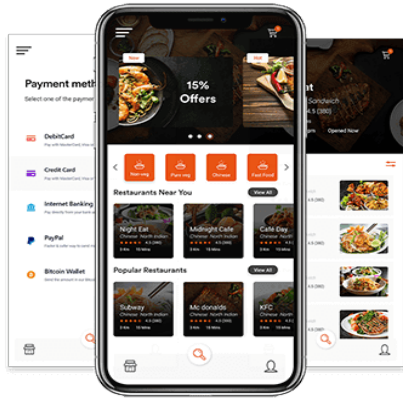
Others, please specify: \_\_\_\_\_ End of

survey. Thank you so much for your responses!

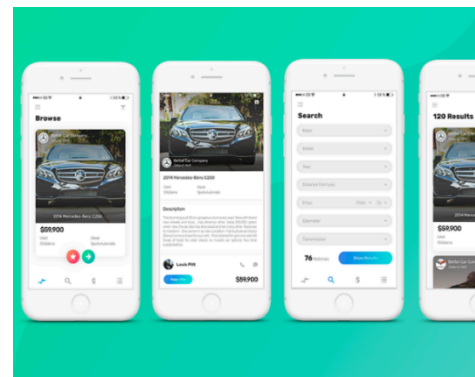
—

## APPENDIX D

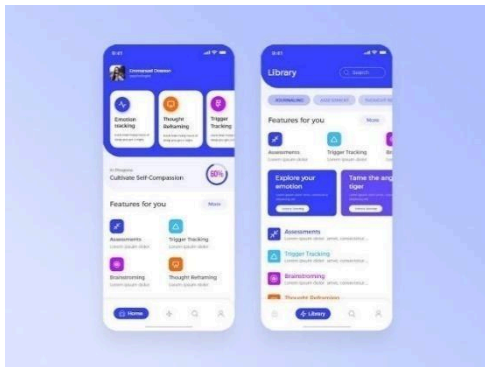
### Preferred Network Interface



**Photograph 1.** Mental health content in separate pods



**Photograph 3.** Mental health content in drop-down menus



**Photograph 2.** Mental health content in links

**APPENDIX E**  
**Letter to SUSH Principal**



University of the Philippines  
Open University  
Faculty of Information and Communication

Date: \_\_/\_\_/20\_\_

**Principal, Senior High School**  
Silliman University Dumaguete

Dear SUSH Principal:

I, the undersigned, is taking Master of Development Communication from the University of the Philippines Los Baños (Open University). In this connection, I am conducting a research study entitled *Design for Mental Health Communication Network for Senior High School Students*.

In this regard, I would like to request for an interview schedule with you regarding the study as you are an authority of implementing programs for students in senior high school students.

The data collected will be used for academic purposes and further studies but rest assured that it will be treated with utmost confidentiality.

Thank you so much for your assistance.

Sincerely yours,

RoyanniMiel M. Hontucan

[rmhontucan@up.edu.ph](mailto:rmhontucan@up.edu.ph)

## APPENDIX F

### Letter to SHS Student Governor



University of the Philippines  
Open University  
Faculty of Information and Communication

Date: \_\_/\_\_/20\_\_

**Governor, Senior High School**  
Silliman University Dumaguete

Dear SUSH Governor:

I, the undersigned, is taking Master of Development Communication from the University of the Philippines Los Baños (Open University). In this connection, I am conducting a research study entitled *Design for Mental Health Communication Network for Senior High School Students*.

In this regard, I would like to request for an interview schedule with you regarding the study as you are the governing body of senior high school students that have the authority to mobilize the senior high school population.

The data collected will be used for academic purposes and further studies but rest assured that it will be treated with utmost confidentiality.

Due to the COVID-19 health protocols, the interview would only be conducted online.

Thank you so much for your assistance.

Sincerely yours,

Royanni Miel M. Hontucan

[rmhontucan@up.edu.ph](mailto:rmhontucan@up.edu.ph)

## APPENDIX G

### Letter to SUSH Guidance Counselor



University of the Philippines  
Open University  
Faculty of Information and Communication

Date: \_\_/\_\_/20\_\_

**Guidance Counselor**  
Senior High School  
Silliman University Dumaguete

Dear SUSH Guidance Counselor:

I, the undersigned, is taking Master of Development Communication from the University of the Philippines Los Baños (Open University). In this connection, I am conducting a research study entitled *Design for Mental Health Communication Network for Senior High School Students*.

In this regard, I would like to request for an interview schedule with you regarding the study as you are an authority and an expert of mental health care in senior high school.

The data collected will be used for academic purposes and further studies but rest assured that it will be treated with utmost confidentiality.

Thank you so much for your assistance.

Sincerely yours,

Royanni Miel M. Hontucan

[rmhontucan@up.edu.ph](mailto:rmhontucan@up.edu.ph)

## APPENDIX H

### Letter to SOUL Specialist



University of the Philippines  
Open University  
Faculty of Information and Communication

Date: \_\_/\_\_/20\_\_

#### **Training Specialist**

Silliman Online University Learning  
Silliman University Dumaguete

Dear SOUL Training Specialist:

I, the undersigned, is taking Master of Development Communication from the University of the Philippines Los Baños (Open University). In this connection, I am conducting a research study entitled *Design for Mental Health Communication Network for Senior High School Students*.

In this regard, I would like to request for an interview schedule with you regarding the study as you are an authority and an expert of information and communication technology (ICT) in SU.

The data collected will be used for academic purposes and further studies but rest assured that it will be treated with utmost confidentiality.

Thank you so much for accommodating my request.

Sincerely yours,

Royanni Miel M. Hontucan

[mhontucan@up.edu.ph](mailto:mhontucan@up.edu.ph)

## APPENDIX I: Frequency Tally

Classification/Items	Questions	Type	Selection	Frequency	Percentage	Rank
<b>Profile</b>						
	Biological Gender	Single selection	Male	72	31.9%	2
			Female	154	68.1%	1
	Age	Single selection	16	56	24.8%	2
			17	115	50.9%	1
			18	52	23%	3
			19	2	0.9%	3
			20	1	0.4%	4
	Strand	Single selection	STEAM	151	66.8%	1
			ABM	21	9.3%	3
			HUMMS	49	21.7%	2
Arts & Design			5	2.2%	4	
<b>Mental Health Care Interest</b>						
	How likely are you to want to learn about mental health?	Single selection	Highly Likely	114	50.4%	1
			Most Likely	82	36.3%	2
			Moderately Likely	25	11.1%	3
			Least Likely	3	1.3%	5
			Not Likely	2	0.9%	4
<b>Importance of Mental Health Care Interest</b>						
	How important is taking care of mental health care for you?	Single selection	Very important	185	81.9%	1
			Important	32	14.2%	2
			Somewhat important	8	3.6%	3
			A little bit important	1	0.4%	4
			Not important at all	0	0	5
<b>Reasons for Mental Health Care</b>						
	Why do you think taking care of mental health is necessary?	Multiple selection	To be able to manage overwhelming emotions	199	88.1%	1
			To correct negative/overwhelming thinking patterns	190	84.1%	2
			To become more effective in performing tasks	157	69.5%	3
			To improve my relationships	153	67.7%	4
			To develop resiliency amid problems	151	66.8%	5
			Others	8	3.4%	6
<b>Mental Health Network- Mobile Application</b>						
			It is accessible because I can connect to it anytime	143	63.3%	2
			It is convenient because I can seek resources and assistance anywhere	151	66.8%	1

			It is private because it is designed for individual use	125	55.3%	3
			It is a safe platform for me to communicate with my guidance counsellor	89	39.4%	6
			It is informative when it comes to learning about mental health issues	109	48.2%	5
			It is helpful in improving my mental health care	116	51.3%	4
			Others	7	3.1%	7
<b>Mental Health Network-Literacy</b>						
	What are the mental health topics that you'd want to learn and understand about?	Multiple selection	Stress Management	196	86.7%	1
			Anxiety Management	190	84.1%	2
			Anger Management	139	61.5%	8
			Overcoming eating disorders	73	32.3%	9
			Proper Sleep Management	153	67.7%	4
			Recovery from bullying experiences	47	20.8%	11
			Overcoming loneliness	104	46%	9
			Coping Mechanisms to manage depression	141	62.4%	7
			Coping mechanism amid parental separation	36	15.9%	14
			Self-acceptance when it comes to gender orientation	39	17.3%	13
			Developing a motivated mindset	147	65%	6
			Grief	22	9.7%	15
			Improving social interaction	126	55.8%	8
			Time Management	154	68.1%	3
			Self-esteem Development	148	65.5%	5
			Managing Internet Addiction	62	27.4%	10
	Social Media Use Management	95	42%	9		
	Video Game Time Management	42	18.6%	12		
	Others	6	2.65%	16		
<b>Mental Health Network-Language</b>						
	What is your preferred language for a	Multiple Selection	Cebuano	60	26.5%	2
			Filipino	31	13.7%	3
			English	213	94.2%	1

	mental health network?					
<b>Mental Health Network-Content</b>						
	How do you prefer mental health content to be presented?	Multiple selection	News	48	21.2%	8
			Feature articles	70	31%	6
			Infographics	145	64.2%	2
			Videos	163	72.1%	1
			Podcasts	106	46.9%	4
			E-books	52	23%	7
			Short-minute Tiktok-type videos	140	61.9%	3
			Scientific studies	73	32.3%	5
			Others	5	2.21%	9
<b>Mental Health Network-Features</b>						
	What features of a mental health network do you think could help you take care of your mental health?	Multiple selection	Journaling guides	82	36.3%	7/8
			Motivational videos	143	63.3%	2
			Social media community	98	43.4%	6
			Arts and Crafts Therapeutic activities/exercises	111	49.1%	3
			Physical fitness guides	106	46.9%	5
			Sleeping manuals/guides	110	48.7%	4
			Music Therapy guides	170	75.2%	1
			Animal are Therapy Guides	82	36.3%	7/8
						Others
<b>Mental Health Network-Content Arrangement</b>						
	How do you want the mental health content to be arranged?	Single selection	In separate pods	127	56.2%	1
			In links	51	22.6%	2
			Drop-down menus	48	21.2%	3
			Others	0	0	4
<b>End-User Motivations</b>						
	What would motivate you in using the network?	Multiple selection	Updated content	154	68.1%	2
			Real-time communication with guidance counsellor	116	51.3%	4
			Various mental health-related multimedia activities	124	54.9%	3
			Interest in creation my own multimedia tools related to mental health	59	26.1%	5/6
			Regulated virtual community	59	26.1%	5/6
			As long as my privacy is ensured	190	84.1%	1
						Others
<b>Network Data Privacy</b>						
	Select the security	Multiple selection	Complex password	150	66.4%	2

	features you prefer in keeping your data secured.		System-generated text messages when accessed	31	13.72%	3
			Email notification of activities	157	69.5%	1
			Others	2	0.9%	4
<b>Mental Health Network-Intervention</b>						
	Are you willing to talk to your guidance counselor online regarding your mental health?	Single selection	Yes	96	42.5%	1
			No	44	19.5%	3
			Maybe	86	38.1%	2
<b>Network Communication Platforms</b>						
	Talking to your guidance counselor is encouraged and highly accessible through the network. If you need to, how would you like to talk to your guidance counselor online?	Multiple selection	Chat	169	74.8%	1
			Voice Call	85	37.6%	2
			Video Call	65	28.8%	3
			Others	2	0.9%	4
<b>Intervention Protocols</b>						
	What information about yourself will you be comfortable sharing to your guidance counselor, provided that, the information you share is treated with utmost confidentiality ?	Multiple selection	Personal information	136	60.2%	3
			Academic strand	145	64.2%	2
			History of abuse	40	17.7%	4
			Personal challenges	188	83.2%	1
			Others	2	0.9%	5
<b>Mental Health Network-Intervention Features</b>						
	Select the virtual features you'd want to incorporate in the network	Multiple selection	Appointment schedule for face-to-face consultation	111	49.1%	3

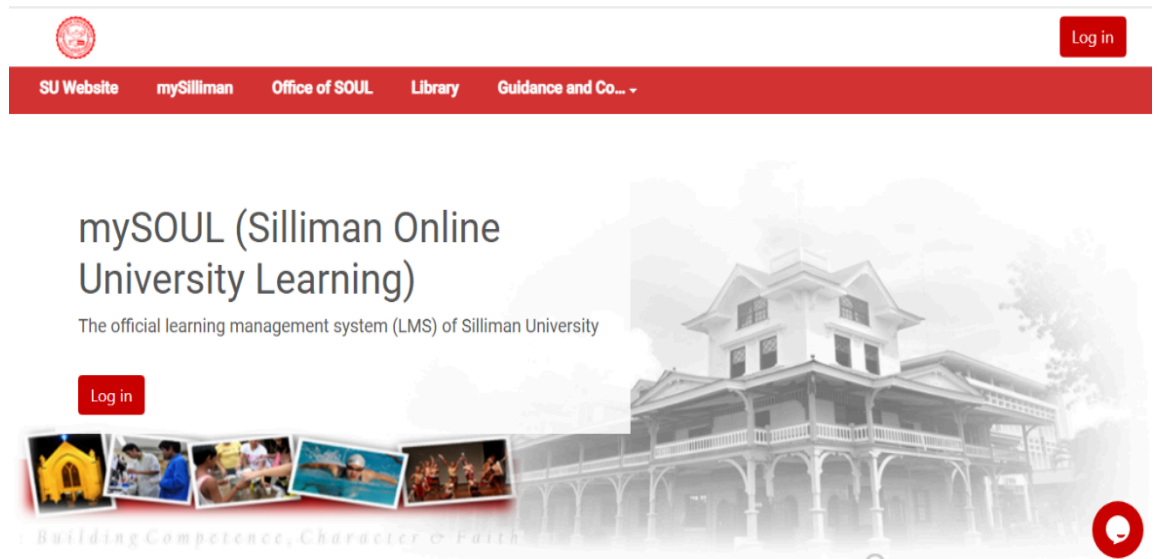
	when it comes to mental health expert intervention.		Pre-Diagnosis Test and Report	148	65.5%	1
			Pre-consultation before scheduled face-to-face consultation	144	63.7%	2
			Others	0	0	4
<b>Mental Health Network-Purpose</b>						
	How would you use a mental health network?	Multiple selection	Referring to it as a credible source of mental health information	168	74.3%	1
			Following and performing the provided mental health-related activities	140	61.9%	2
			Frequently communicating with my guidance counselor/mental health expert	94	41.6%	3
			Creating a virtual community to connect with others	77	34.1%	4
			Creating my own multimedia tools (videos, podcasts, literature, music, etc.) for myself or for sharing with others	43	19%	6
			Collaborating with online and offline members for creating or performing mental health-related activities together in building a support system	80	35.4%	5
			Others	1	0.4%	7
<b>Virtual Community as Social Support System</b>						
	Do you think that a virtual community as a support social system should be established in the network?	Single selection	Yes	159	70.4%	1
			No	16	7.1%	3
			Maybe	51	22.6	2
<b>Features for a Virtual Community</b>						
	Select your preferred features for a	Multiple selection	Nicknames	188	83.2%	1
			Cartoon/Creative Graphics for profile pictures	163	72.1%	3

	virtual community.		Community guidelines to regulate members' behavior	149	65.9%	4
			Group Messaging Platform	134	66%	5
			Private Messaging Platform	178	78.8%	2
			Others	0	0	0
<b>Virtual Community Guidelines</b>						
	If a member of the virtual community violates community guidelines, select your preferred options for actions.	Multiple selection	Reporting the account to management/guidance counsellor	174	77%	1
			Blocking the access of the member to you	129	57.1%	3
			Written warning by the management sent to member's private message and university email	122	54%	4
			Written request for face-to-face discussion from the guidance office issued to the violator	62	27.4%	5
			Deactivation of account if member continues to violate community guidelines after investigation	149	66%	2
			Others	0	0	6
<b>Possible Further Feasibility Studies for Mental Health Networks</b>						
	If the network is developed, it would only cater to enrolled senior high school students in the university. Would you prefer to continue using a mental health communication network even beyond senior high school?		Yes	157	69.5%	1
			No	14	6.2%	3
			Maybe	55	24.3%	2
<b>Possible Further Feasibility Studies for Mental Health Networks</b>						
	What could be the mental health networks that you think	Multiple selection	Mental Health Network for College students	166	73.5%	1

	could help you take care of your mental health beyond senior high school?		Mental Health Network for Professionals	101	44.7%	5
			Mental Health Network for Work-Life Balance	144	63.7%	2
			Mental Health Network for Grief (Loss of loved ones or other personal tragedies)	72	31.7%	6
			Mental Health Network for Parenting Matters	58	25.7%	8
			Mental Health Network for First time Mothers/Fathers	42	18.6%	9
			Mental Health Network for Physical Health-Related Concerns	106	46.9%	3
			Mental Health Network for Aging-related matters	61	27%	7
			Mental Health Network for Marital concerns	38	16.8%	10
			Mental Health Network for Board/Bar Exam Takers	118	52.2%	2
			Mental Health Network for Graduate Students	104	46%	4

## APPENDIX J

### Silliman Online University Learning (SOUL) Interface



**Photograph 4.**mySOUL Homepage interface



**Photograph 5.**mySOUL Guidance Testing Division Virtual Office interface



▶ Motivation Infographicis

✎ Digital Citizenship

OPEN FORUM

☰ Guidance Forum E-Talk



**Photograph 6.**mySOUL Mental health content interface



FORUM

☰ Ate Joh- University Psychometrician

CHAT

☰ Chat with us!

FORUM

☰ Telebehavioral Counseling



**Photograph 7.**mySOUL Mental health chat support interface

