

Factors Influencing Professional Mental Health Help-Seeking Willingness Among People: A Case Study

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Abstract

Mental health has been a taboo subject in many societies for several years. However, because untreated mental illness can lead to severe consequences, people should be encouraged to seek treatment. Unfortunately, individuals are often discouraged by a wide range of factors. This work presents a case study conducted in Qatar to explore the different factors affecting individuals' willingness to seek Mental Health Counselling (MHC). A survey is used to collect data and measure individuals' willingness to get treatment—if needed—and the possible factors preventing them from seeking MHC. These factors include parenting style, perceived stigma, mental health literacy, social media consumption, and service-related factors. The collected data are then statistically analyzed using ANOVA and correlation analysis to find a significant difference between the MHC willingness levels and the mentioned factors. Based on the results, practical actions are recommended to encourage people to achieve a mentally healthy lifestyle.

Keywords: Mental Health Treatment Service, Help-Seeking Willingness, Mental Health Treatment Cost, Mental Health Literacy (MHL), Social Stigma, Social Media, Parenting Style.

1. INTRODUCTION

According to the World Health Organization, depression is a prevalent disorder that affects over 300 million people globally and has varying severity [1]. Depression and mental health illness can develop into serious health conditions if left untreated. Unfortunately, over 75% of low- and middle-income countries do not have access to adequate mental health care [2]. Many individuals with untreated mental health problems do not receive mental health treatments even though the number of service facilities has increased [3]. This indicates that individuals' help-seeking behavior is different for many reasons. Many factors are acting as barriers to mental health counseling (MHC).

Several models have explained help-seeking behaviors. These include the Health Belief Model and the Cycle of Avoidance. The Health Belief Model suggests that help-seeking behavior is determined by the individual's perception of many factors, including their vulnerability to illness, its consequences, and treatment benefits [4]. Furthermore, the Cycle of Avoidance suggests that individuals classify their issues into real/abnormal or normal/universally experienced. However, due to the stigma around mental health, individuals are often unconsciously reluctant to classify their issues as abnormal [5]. The following subsections discuss the independent variables considered in this study: mental health

awareness levels, educational attainment, perceived social stigma about mental health, the parenting style individuals were exposed to, social media consumption, and service-related factors.

1.1. Mental Health Literacy

Mental Health Literacy (MHL) is described as beliefs and knowledge that can help identify, handle, and prevent mental health problems or disorders [6]. MHL level in individuals can be measured by identifying the main elements: the ability to identify specific mental illness, ask for mental health information, and perform self-treatment. The elements of MHL also include the knowledge of risks and causes, awareness of available help, and attitudes that support proper help-seeking [7]. MHL emerged as the primary research focus over the past few decades, since its assessment paves the way to identify attitudes towards seeking professional help [8]. For this reason, various MHL programs have been developed to improve the early recognition and intervention of mental disorders [9], [10]. Additionally, research into the impact of MHL on help-seeking behavior has attracted considerable interest. Smith and Shochet et al. [11] stated that a high MHL level indicates a greater help-seeking intention. Gulliver et al. [12] conducted a systematic review to summarize the reported barriers and facilitators of willingness in help-seeking in young adults and adolescents. They reported that the inability in recognizing mental illnesses due to poor MHL is one of the barriers to help-seeking. The aforementioned results indicate the significant role of MHL in facilitating a better help-seeking tendency.

1.2. Educational Background

According to studies on educational attainment, lack of education relates to a lack of psychosocial resources, which, in turn, act as a link between education and depressive symptoms. Many research works have proved that greater levels of education are associated with higher physical earnings and mental wellness [13]. However, it is indicated that higher education was not connected with more positive views regarding MHC [14], [15]. This

contradicts research that revealed lower tolerance levels toward people with mental health conditions among the less educated. Yet, in these examinations, the outcomes were not controlled for the effect of other clinical and socio-demographic variables. Belo et al. [16] study examined 403 participants, and the main finding of the study was that educated old-aged people have superior mental prosperity and a more certain relaxation attitude.

1.3. Perceived Social Stigma

The stigma around mental health is commonly associated with discrimination [17]. Fear and shame are two of the most typical reasons preventing mental health treatment-seeking. People are wary of being labeled “mentally ill” or “crazy” because of the negative stigma and discrimination of having a mental disease. They may also be concerned about how a designation like this would affect their profession, education, or other life objectives [18]. Because of that, it is critical to identify the effects of mental health stigma to combat its consequences. The stigma has been assessed using the Stigma-9 Questionnaire (STIG-9), which is applied to 919 patients with mental disorders to evaluate this measure psychometrically. Higher scores suggest a greater likelihood of negative societal ideas, feelings, and behaviors against those who are mentally ill [19]. Moreover, in a study that included 482 clients from different clinics in Jordan, it was predicted that the factors influencing their attitudes toward formal MHC are the cultural views about mental conditions and their level of perceived stigma toward formal MHC. This study proved this hypothesis after conducting a hierarchical regression model analysis [20]. In addition, the findings in Schnyder and Panczak et al. [21] review confirmed the idea that mental health stigma is linked to an inactive help-seeking behavior. However, the degree of association varies among four types of stigmas which were the Personal Stigma (PersonS), Self-Stigma (SelfS), perceived Public Stigma (PublicS), and Attitudes towards Help-seeking (HelpA).

1.4. Parenting Style

Despite the enormous number of studies investigating help-seeking behaviors, few consider parental roles. Particularly in children and adolescents, it is assumed that parents have an integral role in recognizing the psychological problems and their severity and the support given to their children [22]. Parenting styles can be classified into four categories based on the level of demandingness (ability to monitor the behavior and set limits) and responsiveness (ability to provide support and nurturing). The four categories are authoritative, authoritarian, permissive, and neglectful. Firstly, the authoritative style is a balance between demandingness and responsiveness. On the other hand, the authoritarian style is associated with high demandingness with lower responsiveness. The permissive style consists of higher responsiveness and lower demandingness. Lastly, the neglectful style consists of low levels of both demandingness and responsiveness. A case study conducted in Australia found that a positive authoritative parenting style was associated with greater intentions for help-seeking adolescents [23]. The study only focused on the authoritative parenting style and related it to the help-seeking behavior of individuals. Moreover, a study conducted in the Netherlands investigated the maternal perceptions of their children's mental health and help-seeking willingness and concluded that most respondents expressed that the lack of MHC hinders them from help-seeking, while some expressed that negative judgment poses a barrier [24].

1.5. Social Media Consumption

In recent years, social networking sites have grown in popularity as outlets for sharing personal details, including those associated with emotional health and well-being. Engagement and friendship with different users are established and maintained by commenting on their posts and forming discussion groups. Because Social Media (SM) is prevalent, individuals are constantly exposed to others' opinions. Individuals who require others' input and help might consider using SM as an

alternative way to explore remedies to their mental health problems. SM may offer a once-in-a-lifetime opportunity for young people to improve their mental health. The work done by Gere et al. [25] investigated college students' attitudes toward SM usage, self-therapy, and mental health-seeking behavior and the factors that influence these behaviors. It also considered the ramifications for this group's mental health help-seeking behavior and the adequate approaches for providing them with timely and relevant information. Moreover, Thompson et al. [26] outlined the results of an SM campaign to decrease stigma and boost help-seeking attitudes among youths in a particular Midwestern County. According to assessments based on population-level data, students exposed to the campaign's content experienced notable reductions in self-reported stigma behaviors and increased help-seeking attitudes. Students who had above-average change also experienced fewer mental health issues. Similarly, efforts were made to raise awareness of mental health issues and enhance access to resources for pre-adolescence with mental health challenges by creating "mindyourmind," a web-based initiative with a comprehensive SM presence [27]. The study evaluated SM techniques to understand their impact on teenage MHL and help-seeking behavior.

1.6 Service-related Factors

Eisenberg et al. [28] explored the association between help-seeking behavior and accessibility to mental health services among a community-based sample of undergraduate and graduate students. A conclusion was reached that, even in a setting where all students had free short-term psychotherapy and other primary health care, most students with visible mental illnesses went untreated.

1.7 Objectives and Contributions

This work aims to conduct a case study to investigate individuals' mental health help-seeking behaviors thoroughly and deeply and the factors influencing such decisions (summarized in Figure 1 and Table 1). The

major contributions of this paper can be summarized as:

1. Studying and analyzing the impact of the different parenting styles (authoritative, authoritarian, and permissive) on help-seeking behavior instead of one parenting style.
2. Finding a direct relation between SM consumption and the individuals' willingness to seek professional mental health rather than just focusing on the impact of social media and the awareness levels.
3. Investigating the correlation between the MHL level and the perceived social stigma with the help-seeking behavior of individuals.
4. Investigating the differences between the help-seeking intentions with service-related factors, such as prior experience, treatment cost, and accessibility to MHC facilities.

5. Based on the findings, conclusions and practical actions are recommended to aid in the construction of proper MHC services and encourage individuals to seek professional help when needed.

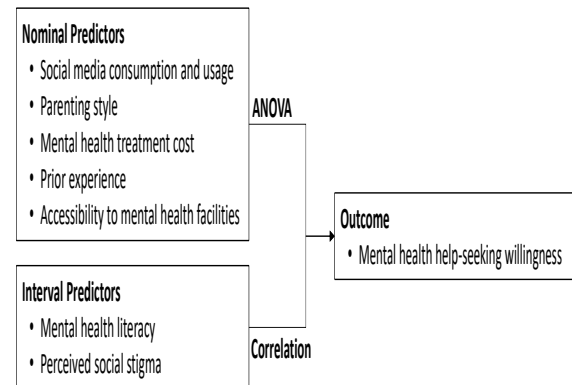


Figure 1. Predictor and outcome variables

Table 1. Independent factors considered in the case study

Ref.	[6]-[12]	[17]-[21]	[22]-[24]	[25]-[27]	[28]
Factor	Mental health awareness	Perceived social stigma	Parenting style	SM consumption	Service-related factors

The remaining work is organized as follows: Section 2 presents the methodology followed in conducting this paper, including data collection methods and the measures used for the independent variables. Next, section 3 presents the statistical analysis of the collected data, including the one-way Analysis of Variance (ANOVA) and correlation analysis and the respective results. Lastly, section 4 discusses the main findings and recommends practical actions to encourage help-seeking behaviors in individuals. Finally, section 5 concludes the paper.

2. Methodology

2.1 Data Collection Method

A 35-item questionnaire (presented in the Appendix) was constructed and distributed to participants older than 18 years old. The sample initially contained 151 respondents. The sample demographics distribution is

summarized in Table 2. Both participants who did not complete the questionnaire or had low consistency in their responses were excluded from the statistical analysis. All respondents provided consent during the questionnaire, and participation was completely voluntary with no financial incentives for completing the questionnaire. The survey was distributed electronically and translated into Arabic to reach a larger number of people.

Table 2. Sample demographics distribution

Factor	Category	Percentage
Age Group	18-25	52.98%
	26-35	25.83%
	36-45	13.25%
	46-50	5.30%
	> 50	2.65%
Gender	Female	62.91%
	Male	37.09%
Marital Status	Single	62.91%
	Married	36.42%
	Widowed	0.66%
	Divorced	0.00%
Educational	No Formal Education	0.00%

Background	Primary Education	1.32%
	Secondary Education	19.21%
	College/University	62.91%
	Graduate School	16.56%
Employment Status	Unemployed	9.93%
	Student	33.77%
	Employed	48.34%
	Retired	1.32%
	Housewife/Homemaker	6.62%

2.2 Measures

2.2.1. Mental Health Literacy

The mental health awareness level was quantified using the Mental Health Literacy Questionnaire (MHLQ) [29]. The shortened form used in this work consisted of 7 items: 5 items to measure the respondents' knowledge and 2 items to measure their self-assessment capabilities. The items were answered by a 4-point Likert scale, from 0 (disagree) to 3 (agree). The final score for each respondent was calculated by summing the individual answers, resulting in the possible range of 0-21, with 0 indicating unaware and 21 indicating highly aware.

2.2.2. Perceived Social Stigma

The STIG-9 is a measure that quantifies an individual's perceived social stigma. A shorter form of 3 items is taken from the STIG-9 to measure the mental health stigma level of the respondents. The items were answered based on a 4-point Likert scale from 0 to 3, and answers were summed up for each individual. The score ranged from 0-9, where 0 indicates low stigma and 9 indicates high stigma.

2.2.3. Parenting Style

The Parenting Authority Questionnaire (PAQ) is a questionnaire that measures the extent to which respondents rate their parents as authoritative, authoritarian, or permissive [30]. A total of 9 items were used in the questionnaire, with 3 items for each subscale.

The answers were based on a 4-point Likert scale and summed up for each subscale. The subscale with the highest score was considered the parenting style associated with the respondent.

2.2.4. Help-Seeking Behavior

The help-seeking intentions/willingness was measured using the Attitudes Toward Seeking Professional Psychological Help (ATSPPH) scale [31]. The original questionnaire measures the respondent's openness to seek professional MHC and the value they find. In this study, only the openness factor was studied, with a total of 3 items answered by a 4-point Likert scale. The final scores of each respondent, ranging from 0-9, were obtained by summing the individual answers, with 0 indicating complete unwillingness and 9 indicating complete willingness.

2.2.5. Other Factors

The SM, prior experience, accessibility to MHC facilities, and treatment cost were measured by asking direct questions to the respondents.

2.3 Data Visualization

This section states the hypotheses stated for each independent factor. Table 3 lists the null and alternative hypotheses for the statistical tests conducted in this work. Firstly, the normality, variance equality, and outliers are investigated using the Normality, Tests of Equal Variances, and Outliers test in Minitab. Moreover, the correlation between the MHL and Perceived Stigma with the help-seeking behavior is investigated. Lastly, the difference between factors of parenting style, social media consumption, prior experience, accessibility to MHC facilities, and treatment cost is tested using ANOVA.

Table 3. *Null and alternative hypotheses for each factor*

Factor	Null Hypothesis, H_0	Alternative Hypothesis, H_A	Significance Level, α
Normality of responses	The data are normally distributed	The data are not normally distributed	5%
Equal variances between groups	All variances are equal	At least one variance is different	

Outliers Test	All data come from the same normal population	Smallest or largest data is an outlier	
MHL	There is no significant correlation between mental health awareness and mental health willingness levels of the individuals	There is a significant correlation between mental health awareness and mental health willingness levels of the individuals	
Perceived Stigma	There is no significant correlation between perceived stigma and mental health willingness levels of the individuals	There is a significant correlation between perceived stigma and mental health willingness levels of the individuals	
Parenting Style	There is no significant difference between parenting styles and the mental health willingness levels of the individuals, i.e., $\mu_A = \mu_F = \mu_P$	At least one group has different willingness levels than the others	
SM Consumption	There is no significant difference between the social media consumption and the mental health willingness levels of the individuals, i.e., $\mu_{<30 \text{ min}} = \mu_{1 \text{ hour}} = \mu_{1-2 \text{ hours}} = \mu_{2-3 \text{ hours}} = \mu_{>4 \text{ hours}}$	At least one group has different willingness levels than the others	
SM usage for online help-seeking	There is no significant difference between the social media usage for online help-seeking and the mental health willingness levels of the individuals, i.e., $\mu_{yes} = \mu_{no}$	At least one group has different willingness levels than the others	
Prior Experience	There is no significant difference between individuals who had prior experience in MHC and the mental health willingness levels of the individuals, i.e. $\mu_{yes} = \mu_{no}$	At least one group has different willingness levels than the others	
MHC accessibility	There is no significant difference between individual's accessibility to MHC facilities and the mental health willingness levels, i.e., $\mu_{yes} = \mu_{no} = \mu_{idk}$	At least one group has different willingness levels than the others	
Treatment Cost	There is no significant difference between treatment cost and the mental health willingness levels of the individuals, i.e., $\mu_{cheap} = \mu_{affordable} = \mu_{costly} = \mu_{idk}$	At least one group has different willingness levels than the others	

2.4 Data Pre-processing

Upon collecting the data, the internal consistency of responses was calculated using the Cronbach Alpha. A Cronbach alpha larger than 0.6 is considered acceptable [32]. Thus, the Cronbach alpha was computed for each independent factor having multiple items in the questionnaire, as shown in Table 4. Since the responses' reliability for the Parenting Style

questions resulted in a low Cronbach Alpha, the data was processed to eliminate the inconsistent data points, leaving only 93 responses. This was conducted by removing the responses with a large standard deviation (more than 1.5) between the answers for each subscale (permissive, authoritarian, and flexible). Then, re-calculating the Cronbach alpha, each subscale met the reliability criteria, as shown in Table 4.

Table 4. *Reliability measured by Cronbach Alpha for each factor*

Factor		Cronbach Alpha before processing (with 151 responses)	Cronbach Alpha after processing (with only 93 responses)
Willingness Levels		0.7722	0.819
MHL		0.6074	-
Perceived Stigma		0.6020	-
Parenting Style	Permissive	0.5552*	0.6215
	Authoritarian	0.6237	0.7142
	Flexible	0.4496*	0.7373

*Inconsistent

3. Analysis and Results

This section describes the statistical analysis conducted on each independent variable. First, the results of the normality, equal variances, and outliers' tests are shown to decide whether a parametric or non-parametric test will be used. After that, the Spearman correlation and ANOVA tests are presented. Conclusions are then drawn based on the obtained correlation coefficients and p-values.

3.1 MHL

For the MHL factor, the Spearman correlation test was performed to measure the degree of association between MHL and the willingness levels of the respondents. The non-parametric statistical approach is selected due to the violation of the normality condition, as the p-values is less than 0.05. The test for equal variances showed inequality in the variance of the collected data. However, the outlier data points identified by the outlier test were eliminated. The correlation coefficient between the MHL and the willingness was 0.126, indicating a very weak correlation between the MHL and the help-seeking willingness.

3.2 Perceived Stigma

Regarding the perceived stigma, the data collected violated the normality test with a p-values less than 0.05. In addition, the equal variance test showed that the data collected had non-equal variances since the p-values was less than 0.05. The outlier test showed a 0.001 p-values, indicating that the extreme value is an outlier. After that, the outlier has been eliminated from the data set. Since all of these tests are violated, the Spearman correlation test,

which is a non-parametric test, was applied to measure the degree of association between perceived stigma and mental health willingness levels of the respondents. A very weak correlation between the stigma and the mental health willingness was concluded, since the value of r was -0.179.

3.3 Parenting Style

For the parenting style, the collected data showed a normal distribution with equal variances among the groups, and no outliers, with p-values of 0.596, 0.463, and 1.00/1.00/1.00, respectively. The ANOVA parametric test was conducted to test the differences among the groups. The ANOVA results are shown in

Table 5. An F-value of 1.19 and a p-value of 0.31 indicate no difference among the different parenting styles in terms of help-seeking willingness (failing to reject H_0).

Table 5. *ANOVA table for Parenting Style*

Source	DF	Adj SS	Adj MS	F-value	p-values
Parenting style	2	13.89	6.945	1.19	0.310
Error	90	526.37	5.849		
Total	92	540.26			

3.4 Social Media (SM)

Regarding the SM factor, the respondents were asked, firstly, about their average daily consumption of SM. The collected data showed a normal distribution with equal variances among the groups, and no outliers, with p-values of 0.072, 0.188, and 1.00/1.00/1.00/1.00, respectively. The usage of the ANOVA parametric test was selected to test the difference among the consumption groups. The

results for the ANOVA test that are shown in Table 6 generated an F-value of 1.05 and a p-value of 0.384. Since the $p\text{-value} > 0.05$, the results show no difference among the consumption groups in terms of the help-seeking willingness (failing to reject H_0).

Table 6. ANOVA table for SM consumption

Source	DF	Adj SS	Adj MS	F-value	p-values
SM	4	26.35	6.588	1.05	0.384
Error	146	916.28	6.276		
Total	150	942.64			

The second aspect of the relationship between SM and help-seeking willingness is to observe if the respondent has used SM for online help-seeking by asking a direct question. The collected data showed a normal distribution with equal variances among the groups, and no outliers, with p-values of 0.227, 0.161, and 1.00/0.303, respectively. The ANOVA parametric test was used to test the difference in the usage of online help-seeking groups. The results are summarized in Table 7. Since the $0.05 < p\text{-values} < 0.1$, the null hypothesis is rejected with marginal significance. Thus, there is a marginally significant difference among the SM usage for online help-seeking groups in terms of the help-seeking willingness. Therefore, it could be concluded that people prone to use social media for online support are more likely to seek professional MHC.

Table 7. ANOVA table for SM usage for online help-seeking

Source	DF	Adj SS	Adj MS	F-value	p-values
SM	1	21.96	21.963	3.55	0.061
Error	149	920.67	6.179		
Total	150	942.64			

3.5 Prior Experience

The respondents were asked if they had prior experience in professional MHC. The collected data showed a normal distribution with equal variances among the groups, and no outliers, with p-values of 0.227, 0.684, and 1.00/1.00, respectively. The results of the ANOVA are shown in Table 8, with an F-value of 8.12 and a P-value of 0.005. Thus, the null hypothesis is rejected, and it can be stated that individuals' prior experience is a factor that hinders people from seeking professional MHC.

Table 8. ANOVA table for prior experience

Source	DF	Adj SS	Adj MS	F-value	p-values
Prior Experience	1	52.83	52.826	8.12	0.005
Error	129	838.91	6.503		
Total	130	891.74			

3.6 MHC Accessibility

After collecting data from respondents regarding their access to MHC facilities, data analysis was applied to test the normality of the data. Analysis showed that the data collected were normally distributed, and all variances were equal since calculated p-values were greater than 0.05. Moreover, all data values come from the same normal population (no outliers with the lowest p-values of 0.598). Table 9 shows the results of the ANOVA test with an F-value of 7.17 and a p-values of 0.001. Accordingly, the null hypothesis is rejected, which indicates that the accessibility to MHC facilities is a factor that prevents people from seeking MHC.

Table 9. ANOVA table for individuals' accessibility to MHC facilities

Source	DF	Adj SS	Adj MS	F-value	p-values
MHC Acc.	2	83.23	41.614	7.17	0.001
Error	148	859.41	5.807		
Total	150	942.64			

3.7 Treatment Cost

The respondents were asked to classify the treatment cost as cheap, affordable, or expensive. The collected data showed a normal distribution with equal variances among the groups and no outliers, with p-value of 0.749, 0.447, and 0.669/1.00/1.00, respectively. The results of the ANOVA test are shown in Table 10, with an F-value of 2.79 and a p-value of 0.042. Thus, the null hypothesis is rejected, and it can be stated that the treatment cost is a factor that discourages people from seeking professional MHC.

Table 10. ANOVA table for treatment cost

Source	DF	Adj SS	Adj MS	F-value	p-value
Treatment Cost	3	50.71	16.904	2.79	0.043

Error	147	891.92	6.068		
Total	150	942.64			

3.8 Results Summary

The summary of results of the statistical tests is shown in Table 11. Only the service-related factors (prior experience, accessibility to MHC facilities, and treatment cost) showed significant results at the 5% significance level.

Table 11. *Summary of the statistical test results and conclusions*

Factor	Statistical Test	Statistic and p-value	Conclusion
MHL	Spearman correlation	r: 0.126	Weak correlation
Perceived Stigma		r: -0.179	Weak correlation
Parenting Style	ANOVA	F-value: 1.19, p-value: 0.31	
SM Consumption		F-value: 1.05, p-value: 0.310	
SM usage for online HS		F-value: 3.55, p-value: 0.061	Marginally significant*
Prior Experience		F-value: 8.12, p-value: 0.005	Significant at $\alpha = 0.05$
MHC accessibility		F-value: 7.17, p-value: 0.001	
Treatment Cost		F-value: 2.79, p-value: 0.042	

*significant at $\alpha = 0.1$

4. Discussions & Recommendation

To summarize the main findings, the Spearman correlation analysis between the MHL and the stigma with help-seeking willingness showed a very weak correlation between the variables. The one-way ANOVA test results among the parenting style groups and the average SM consumption showed no significant differences between the groups in terms of the help-seeking willingness levels. However, marginal

significance was found between groups that seek online help in terms of professional help-seeking. Furthermore, significant differences were found between the groups of the service-related factors. People with prior experience had different willingness levels than those who did not experience MHC. There was a significant difference between individuals with different accessibility to MHC facilities. The one-way ANOVA showed significant differences among people who classified the treatment cost as expensive and people who classified it as cheap. Following these results, practical actions are recommended to address those factors that showed significant results.

4.1 Practical Recommendations

Mental health professionals play an essential role in identifying and treating people with mental disorders due to their experience and ability to prescribe medications. However, advocates for expanded mental health access often overlook the lack of access due to psychiatrists' unwillingness to accept insurance as payment. In the study done by Bishop et al. [33], it was found that psychiatrists have much lower acceptance rates for insurance than other specialties. These low acceptance percentages may be a barrier to individuals accessing MHC. A similar observation was found in the data analysis performed in this paper. As it is clear from Figure 2, respondents who were inclined to seek MHC (having high willingness levels) also agreed that they would consider therapy as an option if their health insurance plan covered it.

From the data analysis, it was observed that the leading cause preventing individuals from seeking professional MHC is the perceived costly nature of the treatment. Therefore, to provide practical recommendations, we should break down the main factors that impact the cost of MHC:

- **Professional Training:** Therapists with more training and experience in the field usually charge more per session.
- **Geographic Location:** Due to the increased cost of living in prominent

metropolitan regions, therapists operating in those locations often charge more.

- **Therapy Type:** The cost of therapy varies based on the disorder, the therapeutic style, and the level of therapist specialty.

If an individual is on a limited budget and cannot afford therapy fees, or if the health insurance does not cover therapy, the following low-cost options are recommended:

- Check the local college/university if they have a training clinic for students pursuing a career in MHC. Experts will supervise those training sessions to evaluate the student performance. Those types of clinics could offer free or low-cost prices.
- Explore online therapy options as they are often low-cost and comparatively as effective as the conventional in-person option.
- Search online for a Sliding-Scale therapy provider. Those providers will set their prices according to the individual's income.

Lastly, since the prior experience of individuals showed significant results with the ANOVA test, it is recommended that counselors/practitioners perform regular self-assessments and increase their flexibility in adopting various treatment approaches. This could affect the patients' willingness and encourage them to seek MHC.

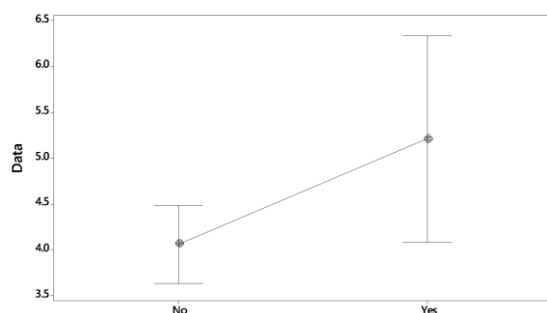


Figure 2. Distribution of answers from the insurance questions (x-axis) and the respondent's willingness level (y-axis)

The uncertainty associated with statistical data depends on the sample size [34]. A larger sample size can significantly reduce the uncertainties associated with the data and increase the precision and reliability of the

sample estimate [35]. In this work, several data points were eliminated in the data-preprocessing phase due to inconsistent responses. The reported conclusions about the parenting styles could be incorrectly drawn since the sample size is small. Moreover, as presented in Table 2, the female category and 18-25 age group were dominant. Certain populations are less likely to have access to online surveying. Thus, research findings are not generalizable since the sample could suffer from selection bias and proper randomization is not achieved [36].

5. Conclusion

This research has analyzed people's willingness to seek MHC through the focal points of both qualitative and quantitative research perspectives. The findings show that seeking mental help is complicated, with numerous factors influencing the decision. In this study, statistical data analysis tests (ANOVA and Spearman correlation) were applied to factors affecting people's decision to seek help for mental health issues. From the findings, it can be concluded that factors like MHL and stigma show a very weak correlation with the willingness to seek MHC. With the ANOVA test, the results on parenting style and SM consumption showed no major difference between groups in terms of the willingness to seek MHC. Despite that, there were significant differences in service-related factors and willingness. Those factors include prior experience, accessibility, and cost. Moreover, marginal differences were spotted among groups who experienced online help-seeking in terms of professional mental help-seeking. Additionally, the results highlighted that excessive cost of treatment was the main deterrent for people to seek professional MHC. Respondents also demonstrated a greater degree of willingness to seek MHC if health insurance covered treatment costs. Furthermore, researchers can assess whether therapists' flexibility in adopting various treatment approaches can impact the patients' willingness to seek MHC. Additionally, future work could include expanding this study to a

larger and unbiased sample. Also, the willingness levels could be investigated with the quality of living, social support, and perceived severity of mental illness.

Data availability: The data presented in this study are available upon reasonable request from the corresponding authors.

Conflict of Interest disclosure: The authors declare no conflict of interest.

Ethic Statement: No ethical approval was required at the time of the survey because the dataset is anonymous. In addition, the consent to participate has been obtained from each respondent and data were used in an aggregate way.

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References

- [1] World Health Organization, "Depression and Other Common Mental Disorders: Global Health Estimates," Geneva, 2017.
- [2] S. Evans-Lacko et al., "Socio-economic variations in the mental health treatment gap for people with anxiety, mood, and substance use disorders: results from the WHO World Mental Health (WMH) surveys," *Psychol Med*, vol. 48, no. 9, pp. 1560–1571, Jul. 2018, doi: 10.1017/S0033291717003336.
- [3] R. Sheppard, F. P. Deane, and J. Ciarrochi, "Unmet need for professional mental health care among adolescents with high psychological distress," *Australian and New Zealand Journal of Psychiatry*, vol. 52, no. 1, pp. 59–67, Jan. 2018, doi: 10.1177/0004867417707818.
- [4] I. M. Rosenstock, "The Health Belief Model and Preventive Health Behavior:," <http://dx.doi.org/10.1177/109019817400200405>, vol. 2, no. 4, pp. 354–386, Dec. 1974, doi: 10.1177/109019817400200405.
- [5] L. Biddle, J. Donovan, D. Sharp, and D. Gunnell, "Explaining non-help-seeking amongst young adults with mental distress: a dynamic interpretive model of illness behaviour," *Sociol Health Illn*, vol. 29, no. 7, pp. 983–1002, Nov. 2007, doi: 10.1111/J.1467-9566.2007.01030.X.
- [6] M. O'Connor and L. Casey, "The Mental Health Literacy Scale (MHLS): A new scale-based measure of mental health literacy," *Psychiatry Research*, vol. 229, no. 1–2, pp. 511–516, Sep. 2015, doi: 10.1016/J.PSYCHRES.2015.05.064.
- [7] A. F. Jorm, A. E. Korten, P. A. Jacomb, H. Christensen, B. Rodgers, and P. Pollitt, "'Mental health literacy': a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment," *Medical Journal of Australia*, vol. 166, no. 4, pp. 182–186, Feb. 1997, doi: 10.5694/J.1326-5377.1997.TB140071.X.
- [8] P. Dias, L. Campos, H. Almeida, and F. Palha, "Mental Health Literacy in Young Adults: Adaptation and Psychometric Properties of the Mental Health Literacy Questionnaire," *International Journal of Environmental Research and Public Health*, vol. 15, no. 7, Jul. 2018, doi: 10.3390/IJERPH15071318.
- [9] J. Potvin-Boucher, M. Szumilas, T. Sheikh, and S. Kutcher, "Transitions: A Mental Health Literacy Program for Postsecondary Students," *Journal of College Student Development*, vol. 51, no. 6, pp. 723–727, 2010, doi: 10.1353/CSD.2010.0014.
- [10] S. Bapat, A. Jorm, and K. Lawrence, "Evaluation of a mental health literacy training program for junior sporting clubs," *Australas Psychiatry*, vol. 17, no. 6, pp. 475–479, Dec. 2009, doi: 10.1080/10398560902964586.
- [11] C. L. Smith and I. M. Shochet, "The Impact of Mental Health Literacy on Help-Seeking Intentions: Results of a Pilot Study with First Year Psychology Students," <http://dx.doi.org/10.1080/14623730.2011.9715652>, vol. 13, no. 2, pp. 14–20, Jan. 2011, doi: 10.1080/14623730.2011.9715652.
- [12] A. Gulliver, K. M. Griffiths, and H. Christensen, "Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review," *BMC Psychiatry*, vol. 10, no. 1, pp. 1–9, Dec. 2010, doi: 10.1186/1471-244X-10-113/TABLES/3.

- [13] M. J. Leitner et al., "Leisure in later life (3rd edition)," *Australian Occupational Therapy Journal*, vol. 53, no. 2, pp. 146–146, Jun. 2006, doi: 10.1111/J.1440-1630.2006.00527.X.
- [14] S. G. Riedel-Heller, H. Matschinger, and M. C. Angermeyer, "Mental disorders--who and what might help? Help-seeking and treatment preferences of the lay public," *Soc Psychiatry Psychiatr Epidemiol*, vol. 40, no. 2, pp. 167–174, Feb. 2005, doi: 10.1007/S00127-005-0863-8.
- [15] N. Shulman and B. Adams, "A comparison of Russian and British attitudes towards mental health problems in the community," *International Journal of Social Psychiatry*, vol. 48, no. 4, pp. 266–278, Dec. 2002, doi: 10.1177/002076402128783307.
- [16] P. Belo, E. Navarro-Pardo, R. Pocinho, P. Carrana, and C. Margarido, "Relationship Between Mental Health and the Education Level in Elderly People: Mediation of Leisure Attitude," *Frontiers in Psychology*, vol. 11, Apr. 2020, doi: 10.3389/FPSYG.2020.00573.
- [17] M. C. Angermeyer and S. Dietrich, "Public beliefs about and attitudes towards people with mental illness: a review of population studies," *Acta Psychiatr Scand*, vol. 113, no. 3, pp. 163–179, Mar. 2006, doi: 10.1111/J.1600-0447.2005.00699.X.
- [18] "8 Reasons Why People Don't Get Treatment for Mental Illness | Advocating for Better Mental Health." <http://davidusman.com/2015/06/11/8-reasons-why-people-dont-get-mental-health-treatment/> (accessed Mar. 09, 2022).
- [19] B. Gierk, B. Löwe, A. M. Murray, and S. Kohlmann, "Assessment of perceived mental health-related stigma: The Stigma-9 Questionnaire (STIG-9)," *Psychiatry Res*, vol. 270, pp. 822–830, Dec. 2018, doi: 10.1016/J.PSYCHRES.2018.10.026.
- [20] N. M. Al Ali, M. K. Alqurneh, H. Dalky, and H. Al-Omari, "Factors affecting help-seeking attitudes regarding mental health services among attendance of primary health care centers in Jordan," *International Journal of Mental Health*, vol. 46, no. 1, pp. 38–51, Jan. 2017, doi: 10.1080/00207411.2016.1264039.
- [21] N. Schnyder, R. Panczak, N. Groth, and F. Schultze-Lutter, "Association between mental health-related stigma and active help-seeking: systematic review and meta-analysis," *Br J Psychiatry*, vol. 210, no. 4, pp. 261–268, Apr. 2017, doi: 10.1192/BJP.BP.116.189464.
- [22] D. E. Logan and C. A. King, "Parental Facilitation of Adolescent Mental Health Service Utilization: A Conceptual and Empirical Review," *Clinical Psychology: Science and Practice*, vol. 8, no. 3, pp. 319–333, 2001, doi: 10.1093/CLIPSY.8.3.319.
- [23] M. Maiuolo, F. P. Deane, and J. Ciarrochi, "Parental Authoritativeness, Social Support and Help-seeking for Mental Health Problems in Adolescents," *J Youth Adolesc*, vol. 48, no. 6, pp. 1056–1067, Jun. 2019, doi: 10.1007/S10964-019-00994-4.
- [24] I. J. E. Flink, T. M. J. Beirens, D. Butte, and H. Raat, "The Role of Maternal Perceptions and Ethnic Background in the Mental Health Help-Seeking Pathway of Adolescent Girls," *Journal of Immigrant and Minority Health*, vol. 15, no. 2, p. 292, Apr. 2013, doi: 10.1007/S10903-012-9621-7.
- [25] B. O. Gere, N. Salimi, and A. Anima-Korang, "Social Media Use as Self-Therapy or Alternative Mental Help-Seeking Behavior," *IAFOR Journal of Psychology & the Behavioral Sciences*, vol. 5, no. 2, pp. 21–36, Jan. 2020, doi: 10.22492/IJPBS.5.2.02.
- [26] A. Thompson, S. Hollis, K. C. Herman, W. M. Reinke, K. Hawley, and S. Magee, "Evaluation of a Social Media Campaign on Youth Mental Health Stigma and Help-Seeking," <https://doi.org/10.1080/2372966X.2020.1838873>, vol. 50, no. 1, pp. 36–41, 2021, doi: 10.1080/2372966X.2020.1838873.
- [27] T. Halsall, C. Garinger, K. Dixon, and T. Forneris, "Evaluation of a Social Media Strategy to Promote Mental Health Literacy and Help-Seeking in Youth," <https://doi.org/10.1080/15398285.2019.1571301>, vol. 23, no. 1, pp. 13–38, Jan. 2019, doi: 10.1080/15398285.2019.1571301.
- [28] D. Eisenberg, E. Golberstein, and S. E. Gollust, "Help-seeking and access to mental health care in a university student population," *Med Care*, vol. 45, no. 7, pp. 594–601, Jul. 2007, doi: 10.1097/MLR.0B013E31803BB4C1.

- [29] A. F. Jorm, A. E. Korten, P. A. Jacomb, H. Christensen, B. Rodgers, and P. Pollitt, "‘Mental health literacy’: a survey of the public’s ability to recognise mental disorders and their beliefs about the effectiveness of treatment.," *The Medical Journal of Australia*, vol. 166, no. 4, pp. 182–186, Feb. 1997, doi: 10.5694/J.1326-5377.1997.TB140071.X.
- [30] J. R. Buri, "Parental Authority Questionnaire," *Journal of Personality Assessment*, vol. 57, no. 1, pp. 110–119, 1991, doi: 10.1207/S15327752JPA5701_13.
- [31] E. Fischer and A. Farina, "Attitudes toward seeking professional psychological help: A shortened form and considerations for research.," *J Coll Stud Dev*, vol. 36, pp. 368–373, 1995.
- [32] J. Pallant, *SPSS Survival Manual : A Step by Step Guide to Data Analysis Using IBM SPSS*, 7th ed. Routledge, 2002. doi: 10.4324/9781003117452.
- [33] T. F. Bishop, M. J. Press, S. Keyhani, and H. A. Pincus, "Acceptance of insurance by psychiatrists and the implications for access to mental health care," *JAMA Psychiatry*, vol. 71, no. 2, pp. 176–181, 2014, doi: 10.1001/jamapsychiatry.2013.2862.
- [34] B. S. Anderson, "What executives get wrong about statistics: Moving from statistical significance to effect sizes and practical impact," *Business Horizons*, May 2021, doi: 10.1016/J.BUSHOR.2021.05.001.
- [35] S. R. Jones, S. Carley, and M. Harrison, "An introduction to power and sample size estimation," *Emergency Medicine Journal : EMJ*, vol. 20, no. 5, p. 453, 2003, doi: 10.1136/EMJ.20.5.453.
- [36] C. Andrade, "The Limitations of Online Surveys," *Indian Journal of Psychological Medicine*, vol. 42, no. 6, p. 575, Nov. 2020, doi: 10.1177/0253717620957496.