

Research Paper

Digital Cognitive Behavioral Therapy for the Average Person in Developing Countries: A Study of Free Resources and Barriers

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Abstract

Digital Cognitive Behavioral Therapy (DCBT) is an effective treatment choice for Mental Health Conditions (MHC), particularly for those who face constraints in accessing traditional in-person therapy. However, in developing countries, several hindrances such as lack of technology, digital illiteracy, inadequate internet connectivity, and cultural barriers deter the average person from effectively using DCBT. The study examines and presents SWOT (Strengths, Weaknesses, Opportunities, and Threats) of several diverse types of online resources, including online counseling platforms, peer-to-peer support communities, self-help programs, mindfulness meditation resources, self-help therapy modules, videos, online therapy services for teenagers, mental health first aid resources, confidential and anonymous support services. The study presents a review of the most widely used and effective DCBT resources and it evaluates the difficulties faced by people in accessing these resources in Pakistan. The results reveal that only 5% of individuals seek in-person therapy often, with 68% having limited knowledge of online mental health resources. 77% of survey participants have never used online mental health resources and express concerns about privacy and security. Based on the findings and literature review the study guides the development of strategies to enhance access to DCBT resources.

Introduction

Mental Health (MH) and wellness concerns have grown in recent years, particularly with technology and the internet. The online world has opened the door for new possibilities in seeking Mental Health Support (MHS). It has led to the emergence of a wide range of websites and apps related to MH. These online resources offer several benefits, including convenience,

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accessibility, a wide range of therapy options, personalized support, cost-effectiveness, and easy-to-use tracking of MH progress. However, several challenges come with Online Mental Health Resources (OMHR). The users must be aware of key concerns like technical issues, limited interaction, privacy, security concerns, limited professional guidance, and unverified information. Moreover, some of these resources are specific to modern countries and cannot serve as a total solution for MH in developing countries (Munder, T. et al. 2021). Furthermore, in modern countries, there are also growing concerns about the regulation of these online resources and the need for more recognition from professional organizations.

Given these challenges and opportunities, this research paper aims to explore the current state of OMHR, including websites and apps (García-Palacios, A. et al. 2021). The study highlights the elements that make up these resources, including the user convenience, accessibility of these sites, the quality of support provided, the cost-effectiveness of these resources, and the privacy and security concerns that come with using these resources. The paper looks at the opportunities and limitations of these resources, including the chances for expansion to new markets, innovative technologies, and the need for better collaboration with clinics. The study also considers the impact of these resources on different populations, including teenagers, non-English speakers, and those with acute mental illness. Additionally, the study explores the rising competition in the online MH space and the need for continuous improvement and innovation in the field (Prins, M. et al. 2021). Overall, this research paper provides a comprehensive overview of the current state of OMHR and provides valuable insights into the opportunities and challenges for these resources in the future. This study contributes to the development of better and more accessible MH resources for everyone.

This research paper explores the current state of a certain form of therapy for MHC in developing countries by taking a case study about Pakistan. The study investigates the most utilized and efficient websites and software tools for this therapy, as well as the barriers that prevent access to these resources. Through interviews and surveys, the research sheds light on the perspectives and experiences of individuals in developing countries. The results are set in the context of existing literature, with a focus on the implications for improving access to this therapy (Strunk, D. et al. 2021). The paper concludes by summarizing the main findings and emphasizing the study's importance to MH in developing countries and making recommendations for future research. This research is crucial in filling the knowledge gap about the accessibility and effectiveness of this therapy for individuals in developing countries and appraises the development of strategies to enhance access to DCBT in the future.

Literature Review

Studies have proven that DCBT can be just as effective as traditional face-to-face CBT in treating various MHC. A meta-analysis found that DCBT effectively reduced symptoms of depression, with a large effect size comparable to face-to-face CBT. Studies found that DCBT was effective in treating panic disorder and obsessive-compulsive disorder, respectively. Moreover, DCBT offers several advantages over traditional face-to-face CBT (Baumeister, H., Härter, M., & Knaevelsrud, C. 2020). For one, it provides greater accessibility and convenience to individuals who cannot attend face-to-face therapy sessions or prefer a private and confidential setting. Additionally, DCBT is cost-effective, with lower costs associated with delivering therapy through digital means. Based on the available evidence, DCBT is a promising treatment possibility for individuals with MHC. With its effectiveness, accessibility, and cost-effectiveness, DCBT can increase access to MH treatment for those in need (Fjorback, L. O. et al. 2021; Smit, F. et al. 2021; Andersson, G. & Carlbring, P. 2021).

Despite the growing popularity of DCBT resources in developed countries, access to these resources stays limited in many developing nations (WHO, 2020). Factors contributing to this disparity include limited access to technology, lack of awareness and knowledge about DCBT, the cultural stigma surrounding MH treatment, and cost barriers. According to a study, 85% of the global population lives in countries with limited access to MH resources, particularly in low-income and rural areas. In these regions, cultural stigma and limited access to traditional face-to-face therapy create further obstacles for individuals seeking MH care (Madigan, D., Kontopantelis, E., & Kendrick, T. 2020; Toffol, E. et al. 2020). Furthermore, the cost of DCBT resources can also be prohibitive for individuals in developing countries who may not have the financial means to pay for online therapy. The scarcity of healthcare resources and funding for MH in these countries worsens these disparities in access to MH treatment (WHO, 2020). Despite these challenges, there are growing numbers interested in making DCBT resources more accessible to individuals in need, particularly in developing countries (Li, Y. et al. 2020; Yang, X. et al. 2020).

In addition to the barriers mentioned above, financial constraints also play a significant role in limiting access to DCBT resources in developing countries. Many individuals may not have the financial resources to pay for online therapy, which can be costly. Furthermore, limited healthcare resources and funding for MH in developing countries worsen these disparities in access to MH treatment (WHO, 2020). However, it is important to note that the implementation of DCBT programs in developing countries requires care and consideration. Simply providing

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access to technology and DCBT resources may not be enough, as it is essential to ensure that these resources are culturally sensitive and proper for the specific needs of individuals in these countries. In addition, training and support are must aspects for MH professionals to ensure that DCBT services deliver effectively and in a culturally sensitive manner (WHO, 2020).

Increasing access to DCBT resources in developing countries can improve MH outcomes for individuals in need (WHO, 2020). While there are many barriers to access, such as limited access to technology and a shortage of trained MH professionals, these need a combination of efforts. Increasing access to technology and training MH professionals can help to overcome these barriers (Proudfoot, J. et al. 2019; Knaevelsrud, C. & Maercker, A. 2019). Additionally, addressing cultural and societal attitudes toward MH and therapy can also play a crucial role in increasing access to DCBT resources (WHO, 2020). By addressing these barriers, we can work towards a future where individuals in developing countries have access to the MH care they need, regardless of their circumstances (Botella, C. et al. 2019; Roberts, N. P. et al. 2019).

Materials and methods

In this study, we aimed to evaluate the effectiveness of OMHR in providing support for individuals in need. Our material and methods included the examination of several diverse types of online resources, including online counseling platforms, peer-to-peer support communities, self-help programs, information and resources, mindfulness and meditation resources, self-help therapy modules, online therapy services specifically for teenagers, MH first aid resources, and confidential and anonymous support services (McEvoy, P. M. et al. 2012). To gather data on the use and impact of these resources, we conducted surveys and analyzed existing research in the field. Our study participants were those who may use OMHRs by their internet resources. Our findings contribute to the understanding of the role of technology in MHS and provide valuable information for those looking to access such resources in the future (Perini, S. J. & Pretzer, J. 2010; Roos, A. et al. 2017).

Online Counseling Platforms

Online counseling platforms, including BetterHelp, Talkspace, MyTherapist, Breakthrough, Online-Therapy, BetterHelp for Teens, and Talkspace for Couples, provide a convenient and accessible way for individuals to receive MHS from the comfort of their own homes. These websites offer a variety of options to meet individual needs, including matching users with the most suitable therapist, text, video, and audio therapy sessions, and a mobile app for on-the-go access. Additionally, each platform specializes in different areas of MH, ensuring that users

receive the proper support. These online counseling platforms are particularly beneficial for individuals who have difficulties attending in-person therapy sessions or live in areas with a shortage of MH providers (Stagg, L. et al. 2018; Andersson, G. et al. 2016). Figure 1 stands for their general navigation layout.

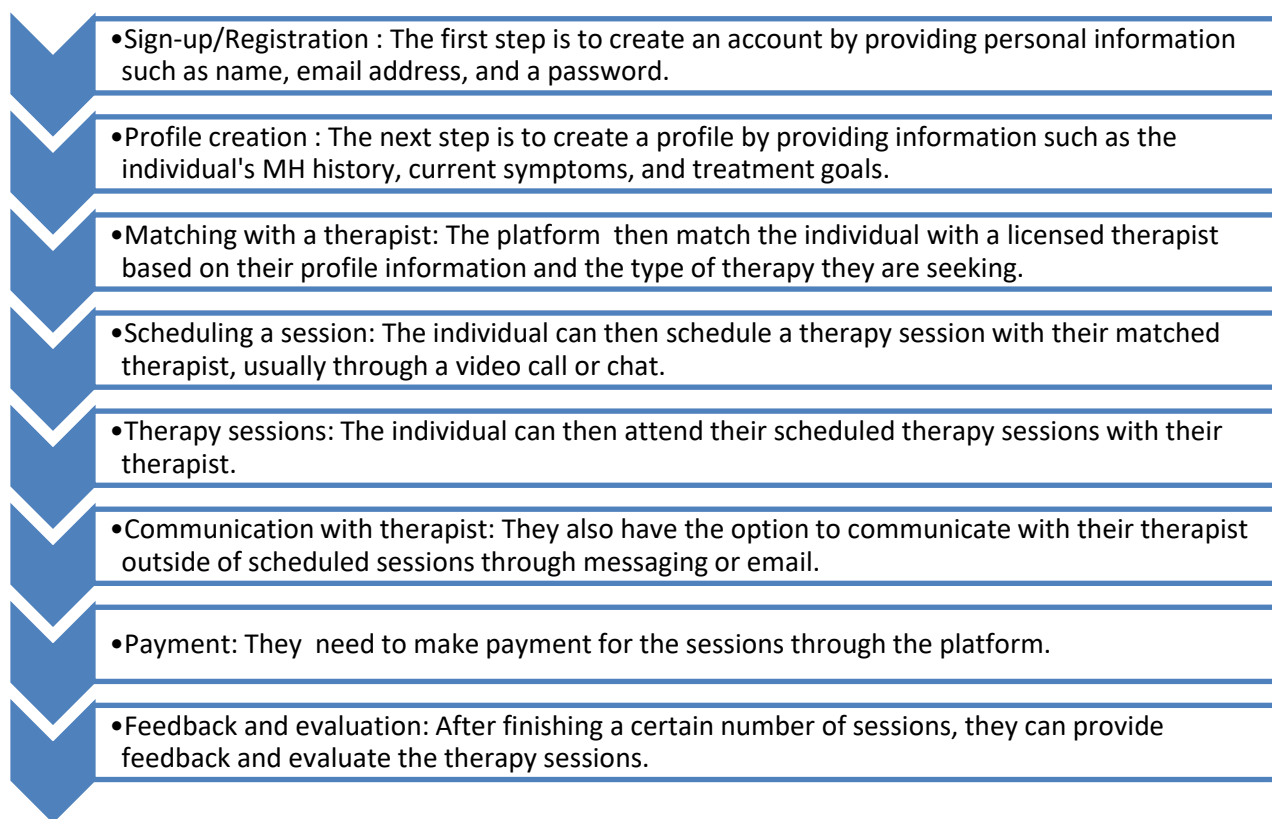


Figure 1. Navigation Algorithm for Online Counseling Platforms

Peer-To-Peer Support Communities

Peer-to-peer support communities, including 7 Cups, Samaritans, BlahTherapy, The Mighty, MH America Support Groups, Anxiety Social Net, and SupportGroup, offer online platforms that foster supportive environments for individuals to connect with others facing similar MH challenges. These online communities provide supportive environments where individuals can connect with others who understand their struggles and offer emotional support, making them a smart choice for those without access to in-person support groups or who prefer the anonymity and flexibility of online communities (Baumeister, H., Härter, M., & Knaevelsrud, C. 2020). Figure 2 displays their general navigation layouts.

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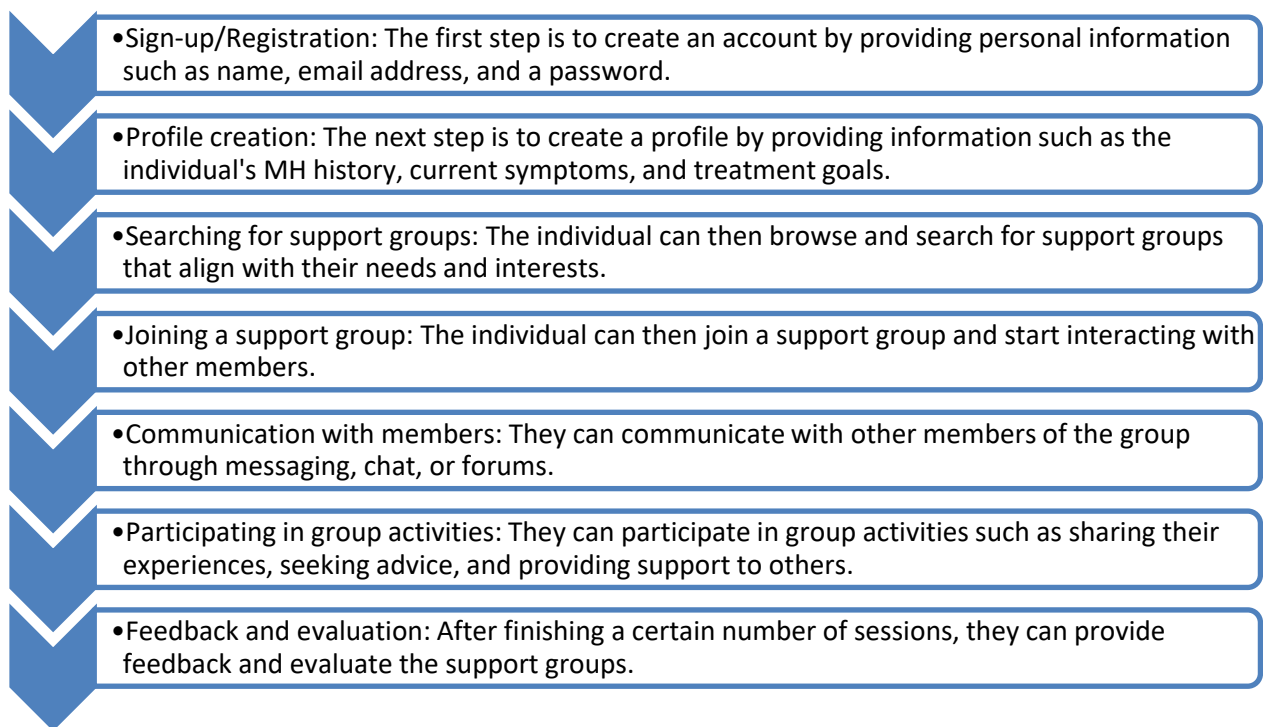


Figure 2. Navigation Algorithm for Peer-To-Peer Support Communities

Self-Help Programs

Self-help programs are online tools that offer individuals access to resources and strategies for improving their MH and overall well-being. Examples of such programs include Moodfit, Woebot, Pacifica, Moodpath, Self-Help for Anxiety Management (SAM), Mindshift CBT, and CBT-i Coach. Moodfit, for instance, provides individuals with a personalized mental wellness plan based on Cognitive-Behavioral Therapy (CBT) principles. Woebot, on the other hand, is a chatbot that employs CBT strategies to offer MHS. Pacifica blends mindfulness, CBT, and mood tracking to help individuals manage stress, anxiety, and depression. Moodpath integrates CBT and positive psychology to improve mental well-being, while SAM provides guidance and resources for individuals struggling with anxiety. Mindshift CBT helps individuals change their thoughts and behaviors related to anxiety using CBT strategies, and CBT-i Coach provides guidance and resources for individuals with insomnia using Cognitive-Behavioral Therapy for Insomnia (CBT-I) principles. Self-help programs offer a convenient and accessible way for individuals to access MHS, especially for those who may have difficulty attending in-person therapy sessions or live in areas with limited MH providers. However, it is important to note that these programs are not a substitute for professional help (Manicavasagar, V. et al. 2019). In case of a health crisis, seeking immediate aid from a healthcare professional is necessary. Figure 3 displays the general navigation layout.

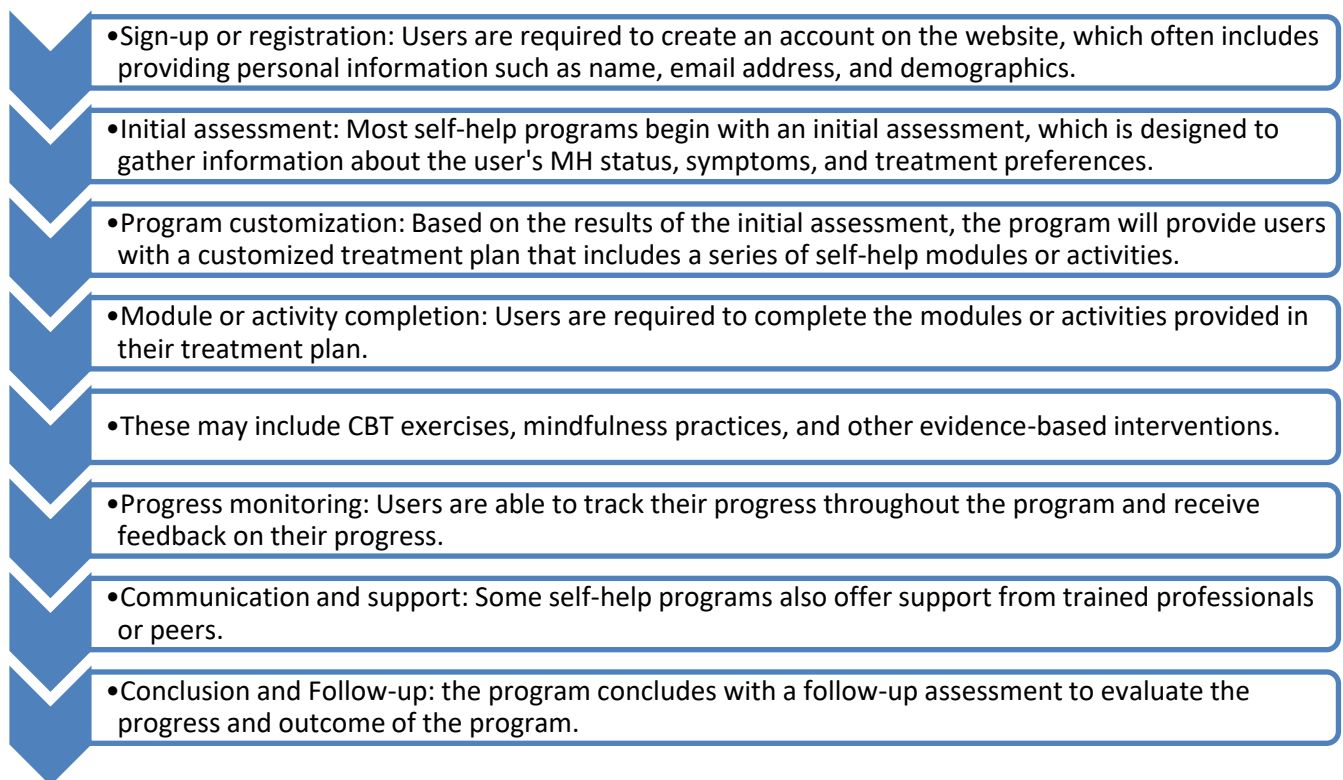


Figure 3. Navigation Algorithm for Self-Help Programs

Information and Resources

Self-help programs and MH information resources, such as MH America, Anxiety UK, Depression, and Bipolar Support Alliance, National Alliance on Mental Illness (NAMI), MH Foundation, MH Information, Support, and Mind, provide individuals with access to extensive information and support for Mental Health Issues (MHI). MH America is a non-profit that offers information and resources on various MH topics, including anxiety, depression, bipolar disorder, and schizophrenia. They also offer information on treatment options and support groups. Anxiety UK, on the other hand, focuses on offering information and support for individuals struggling with anxiety disorders. The MH Foundation supplies information and resources on various MH topics, including anxiety, depression, and stress, and provides information on treatment options and support groups. Similarly, MH Information and Support offers information and resources on various MHIs, including anxiety, depression, and stress, and connects individuals to treatment options and support groups. Mind, a UK-based charity, provides information and resources on a range of MH topics, including anxiety, depression, and stress, and offers information on treatment options and support groups (Toffol, E. et al. 2020). These websites offer a wealth of information and resources for individuals seeking help with MH problems, allowing them to understand their condition, learn about treatment options,

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and connect with support groups and other resources. We have presented the SWOT analysis in Figure 4.

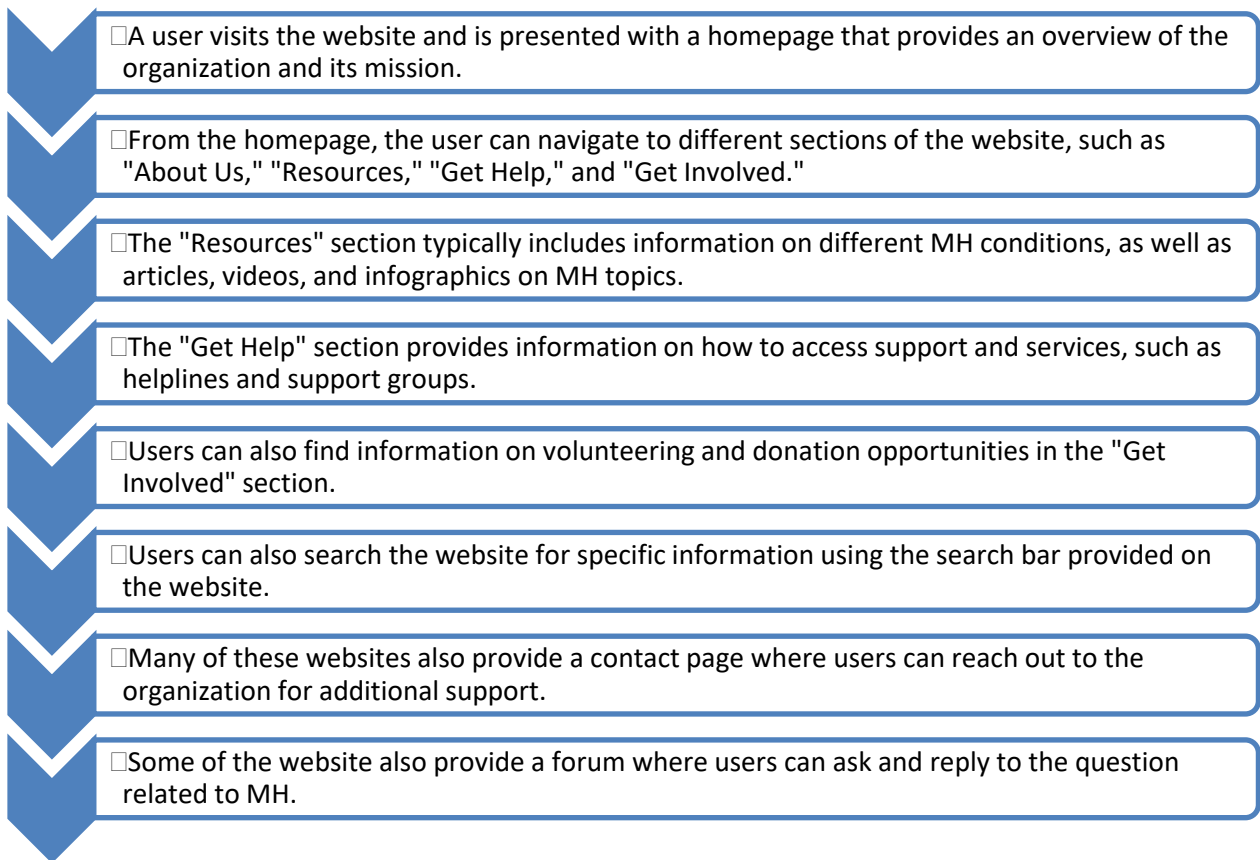


Figure 4. Navigation Algorithm for Information and Recourses

Mindfulness and Meditation

The websites dedicated to mindfulness and meditation provide a range of tools and resources to help individuals in incorporating mindfulness and meditation into their daily routines. Some of the leading websites in this category are Headspace, Calm, Stop, Breathe & Think, Smiling Mind, Insight Timer, and Buddhify. Headspace, an app, guides users to reduce stress and improve their well-being with its offerings of guided meditations, mindfulness exercises, and sleep resources. It provides a free trial and subscription options for other features. Stop, Breathe & Think offers guided meditations, mindfulness exercises, and a journaling feature to help users check their emotions and boost overall well-being. Buddhify is a free app that offers guided meditations, mindfulness exercises, and sleep resources to help users reduce stress and improve overall well-being. It provides a premium subscription possibility for added features (Baumeister, H., Härter, M., & Knaevelsrud, C. 2020; Madigan, D., Kontopantelis, E., & Kendrick, T. 2020). All these websites provide unique features such as guided meditations, mindfulness exercises, and sleep resources to help users reduce stress and improve well-being.

They offer free access, as well as premium subscriptions for added features. Figure 5 depicts the general navigation layout.

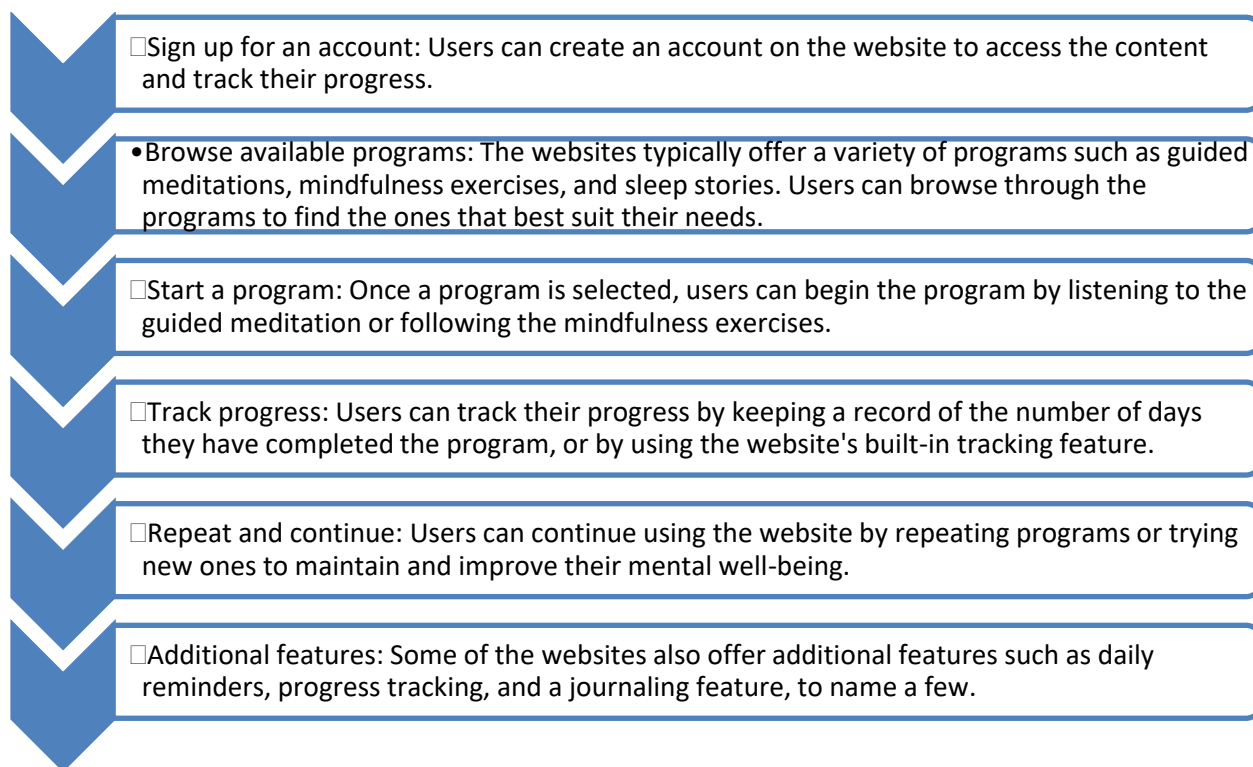


Figure 5. Navigation Algorithm for Mindfulness and Meditation

Self-Help Therapy Modules, Videos, and Resources

The websites of self-help therapy offer a wealth of tools and resources to empower individuals to manage their MH and well-being. Therapy Assistance Online (TAO) provides access to interactive therapy modules, which cover various MH concerns such as anxiety, depression, and stress. Users can progress through the modules at their own pace and track their improvement. Self-Help for Depression provides many self-help resources to help individuals deal with depression, including a CBT self-help program, videos, and informative articles. MoodGYM, developed by researchers at the Australian National University, provides a CBT-based program that teaches individuals skills to manage their mood and reduce symptoms of depression and anxiety. Beating the Blues offers a self-help program for those with mild to moderate depression, complete with interactive modules, videos, and worksheets to aid users in understanding and managing their symptoms (Prins, M. et al. 2021; Strunk, D. et al. 2021). These websites offer evidence-based tools that are easy to access, helping users to develop new coping skills, manage symptoms, and enhance their MH. Figure 6 highlights the general navigation layout.

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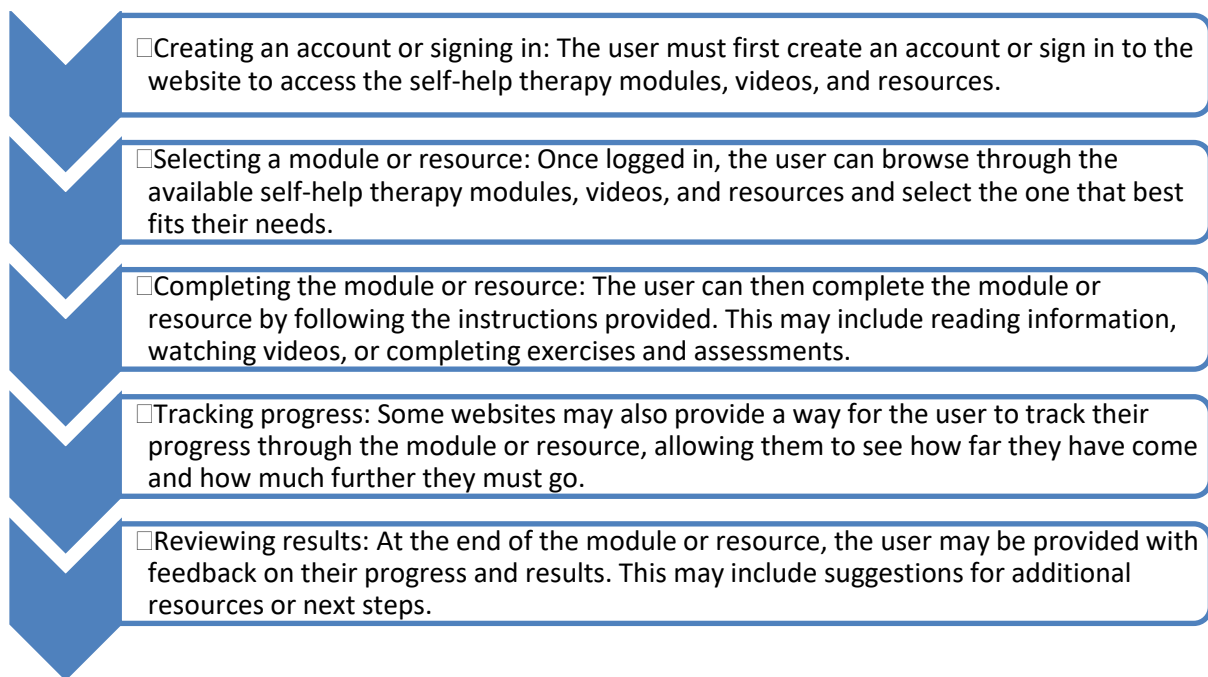


Figure 6. Navigation Algorithm for Self-Help Therapy Modules, Videos, and Resources

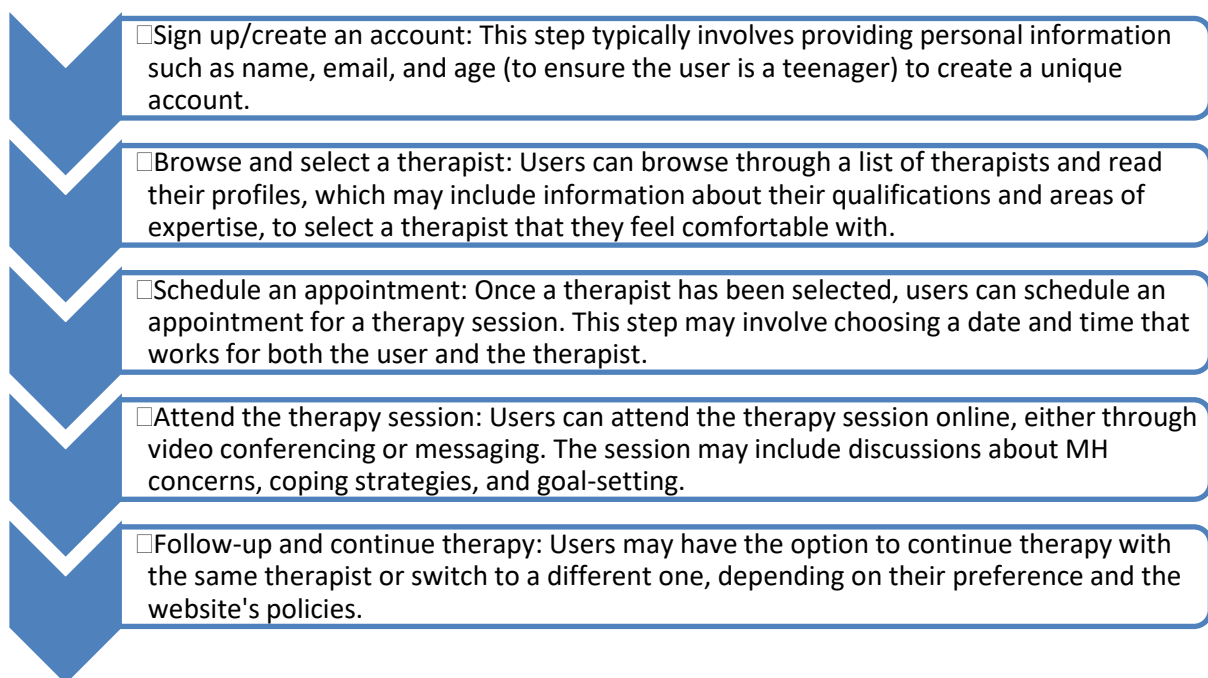


Figure 7. Navigation Algorithm for Online Therapy Services for Teenagers

Online Therapy Services for Teenagers

Online therapy services for teenagers are an expanding trend in MH. These websites, such as Talkspace for Teens, Teen Counseling, The Lowdown, and ReachOut.com, offer a convenient and accessible way for teenagers to receive support and treatment for their MH needs. Talkspace for Teens provides specialized online therapy services to meet the specific needs of teenagers. These websites offer a crucial solution to teenagers who lack access to traditional

therapy services or prefer seeking help online. They provide a convenient and accessible way for teens to receive support and treatment in a confidential environment (García-Palacios, A. et al. 2021; Prins, M. et al. 2021). The SWOT analysis of these websites is in Figure 7 illustrates the general navigation layout of these websites.

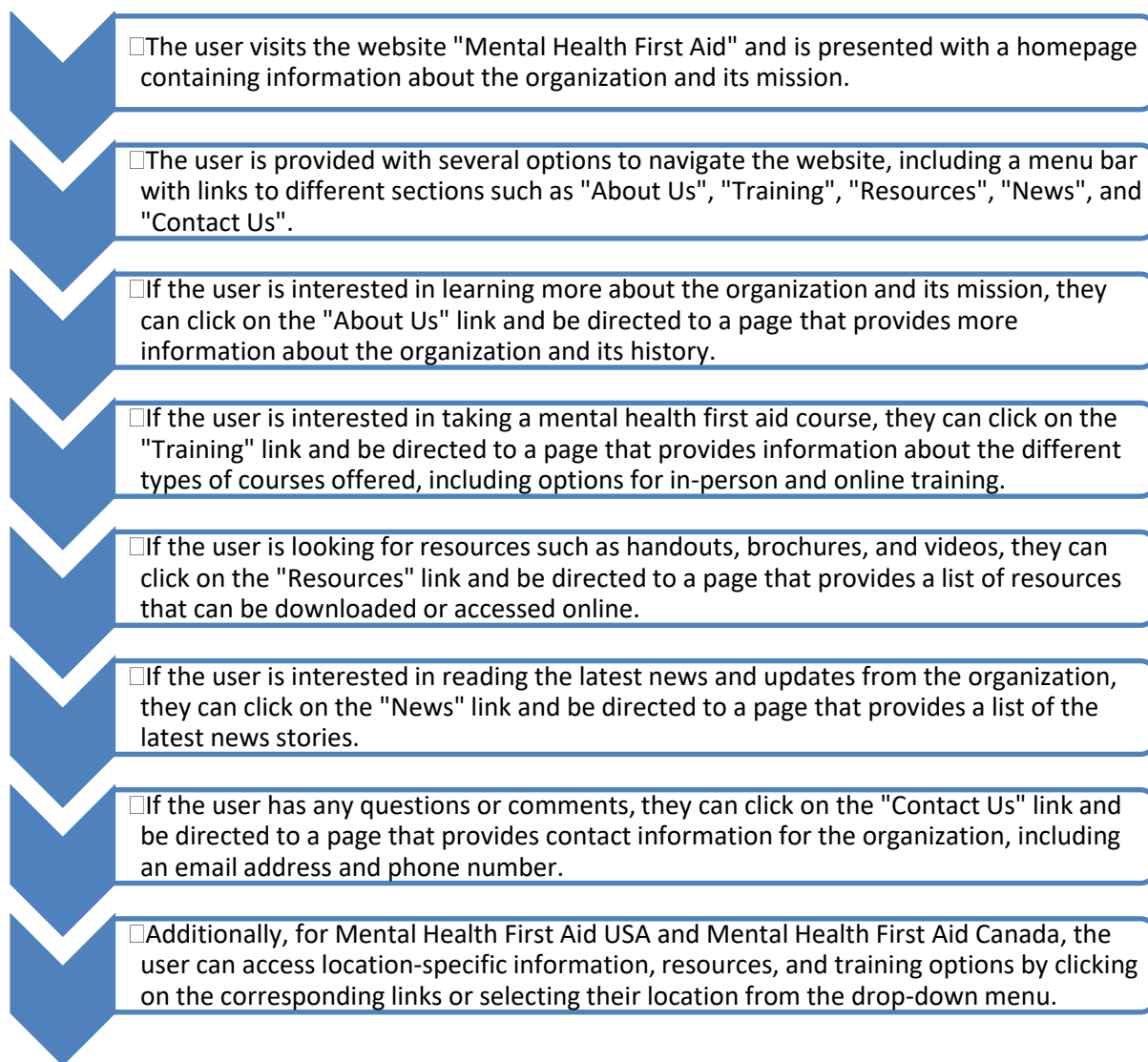


Figure 8. Navigation Algorithm for websites for MH First Aid

MH First Aid

MH First Aid websites aim to equip individuals with the necessary knowledge, skills, and confidence to help someone facing an MH crisis or problem. These websites offer online courses, training programs, and guides to help individuals understand the signs and symptoms of MHI and how to provide support. MH First Aid aims to teach individuals to find early warning signs of MH problems and respond in a supportive manner, including engaging in a supportive conversation and connecting the person to professional help. The websites also educate individuals about various MHIs, such as anxiety, depression, and bipolar disorder, and

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the available treatment options, to reduce the stigma surrounding MH and encourage individuals to seek help when needed (Knaevelsrud, C. & Maercker, A. 2019). The goal of MH First Aid websites is to improve the MH and well-being of individuals, families, and communities by providing accessible, evidence-based resources Figure 8 illustrates their general navigation layout.

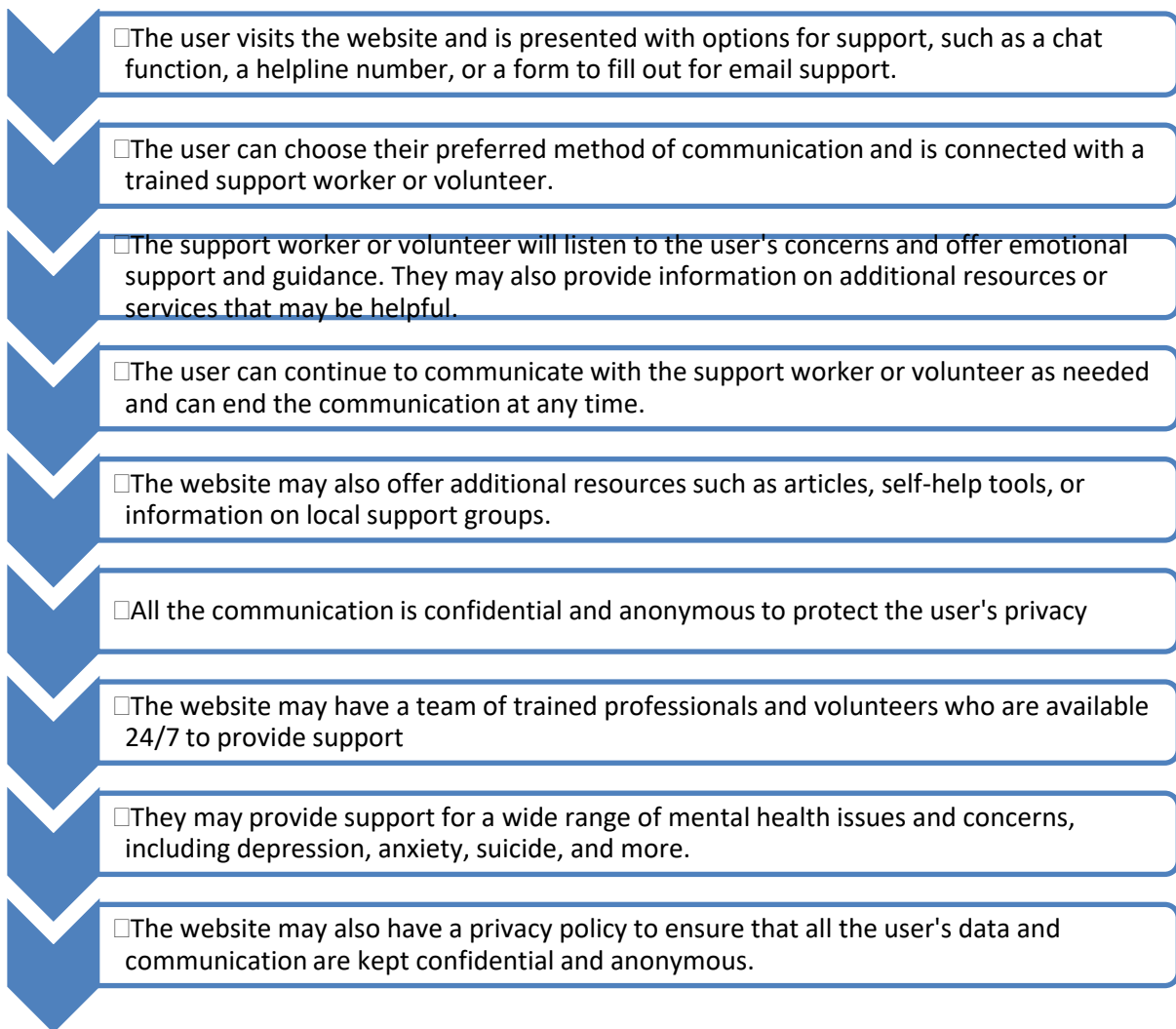


Figure 9. Navigation Algorithm for Confidential and Anonymous Support Service

Confidential and Anonymous Support Service

Confidential and anonymous support services are available over websites such as The Samaritans Ireland, Console, Pieta House, Aware, and Jigsaw. Each organization has a distinct focus, but all share the common goal of helping individuals grappling with MH challenges. The Samaritans Ireland provides a round-the-clock helpline for individuals seeking someone to talk to, as well as an email and letter-writing service. Console, a suicide support charity, offers a helpline, counseling services, and support groups. Pieta House offers professional counseling for individuals experiencing suicidal thoughts or grieving from suicide loss.

Depression, bipolar disorder, and other mood-related conditions are the focus of Aware, which provides a helpline, support groups, and an online support service. Jigsaw supports young people dealing with MHI through a helpline, counseling services, and support groups (Stagg, L. et al. 2018). These websites provide a safe and non-judgmental environment for individuals to openly discuss their feelings and receive the support they need. The SWOT analysis of these websites is in Figure 9.

Results

In this research, our questionnaire assesses public awareness and understanding of MH resources and the challenges they face in accessing them. It covers knowledge of services, personal experience with care, and attitudes toward seeking help, as well as awareness and understanding of MH websites, online therapy availability, and usefulness. The information gathered is useful to improve access to care, decrease stigma, enhance online therapy's effectiveness, and inform research. It provides a comprehensive understanding of the field, tracks changes in public belief, and supplies insights into awareness campaigns. A questionnaire is a valuable tool for understanding public feelings and attitudes toward MH, helping society. This survey has a sample size of 250 individuals to gain insights into the topics in each question. The randomly selected survey participants ensured representativeness and minimize bias.

Figure 10 provides information on the frequency of people who have used in-person therapy. It reveals that 61% of individuals rarely sought in-person therapy, 26% used it a few times, 8% sought it occasionally, and only 5% used it often.

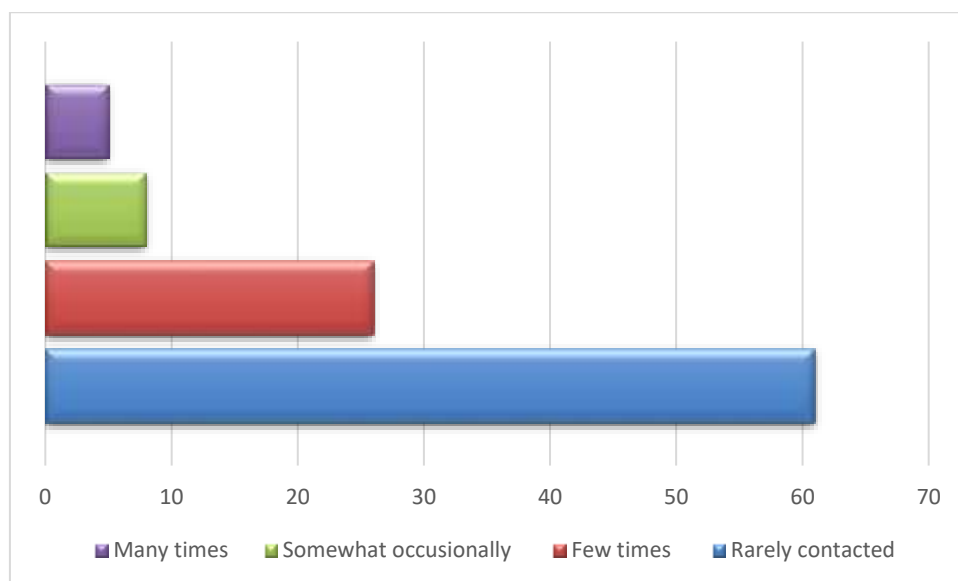


Figure 10. People Contacted In-Person Therapy

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Figure 11 highlights the level of awareness of OMHR among survey participants. 56% reported having no awareness, 21% had some awareness, 16% were very aware, and 7% were extremely aware. The data suggests that 68% of respondents had limited knowledge of OMHR, with only 23% having a prominent level of awareness.

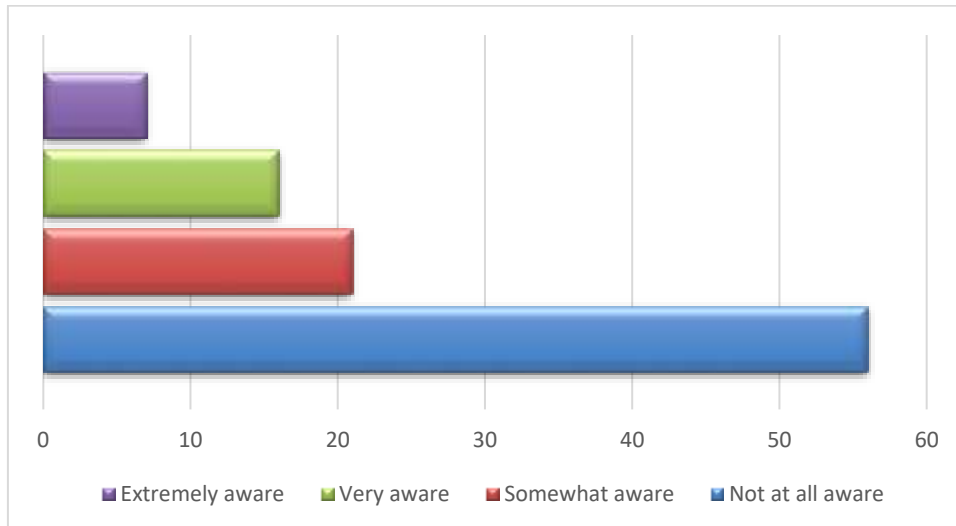


Figure 11. Awareness of the Different OMHR Commonly Available.

Figure 12 shows the usage of OMHR among survey participants. 77% reported never using OMHR, 12% used them once, 7% used them a few times, and 4% used them often. The data suggests that the respondents have not utilized OMHR, with only a small percentage using them often.

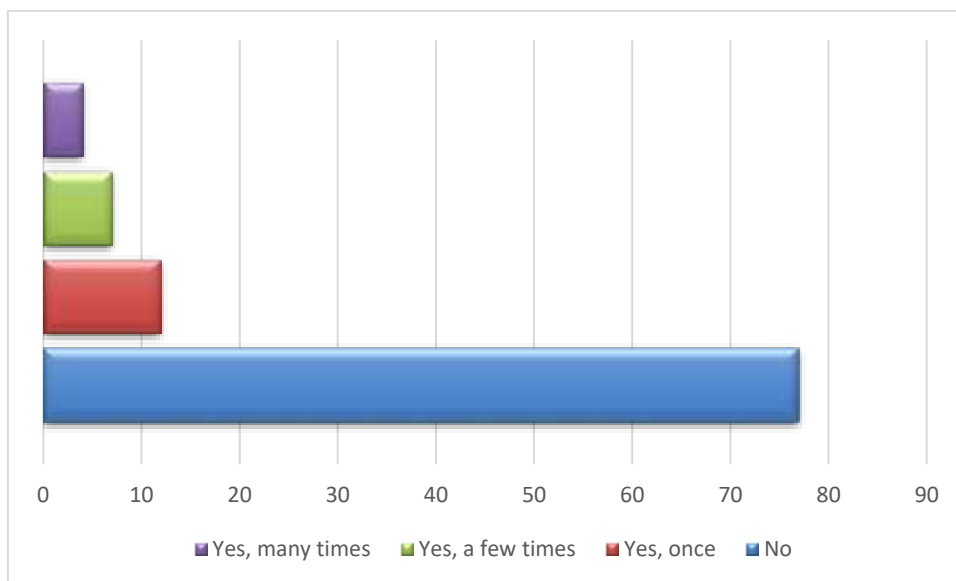


Figure 12. Usage of OMHR in the Past.

Figure 13 displays the perceived obstacles to accessing OMHR among respondents. 37% reported a lack of information or awareness as the biggest barrier, 24% cited fear of stigma or

judgment, 22% reported a lack of trust in the effectiveness of online resources, and 17% showed cost or lack of insurance coverage as the biggest obstacle.

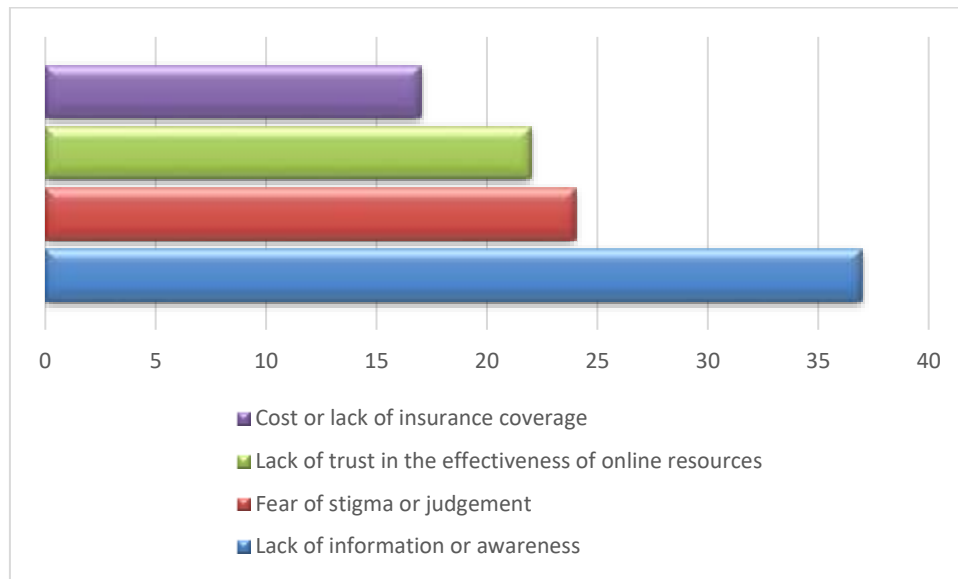


Figure 13. Big Barriers to Accessing OMHR

Figure 14 shows the comfort levels of respondents in discussing their MH with an online therapist or counselor. 40% reported feeling uncomfortable, 23% felt comfortable, 26% felt amazingly comfortable, and 11% felt extremely comfortable. The data suggest that many respondents do not feel comfortable discussing their MH online, with only a small proportion showing extreme comfort.

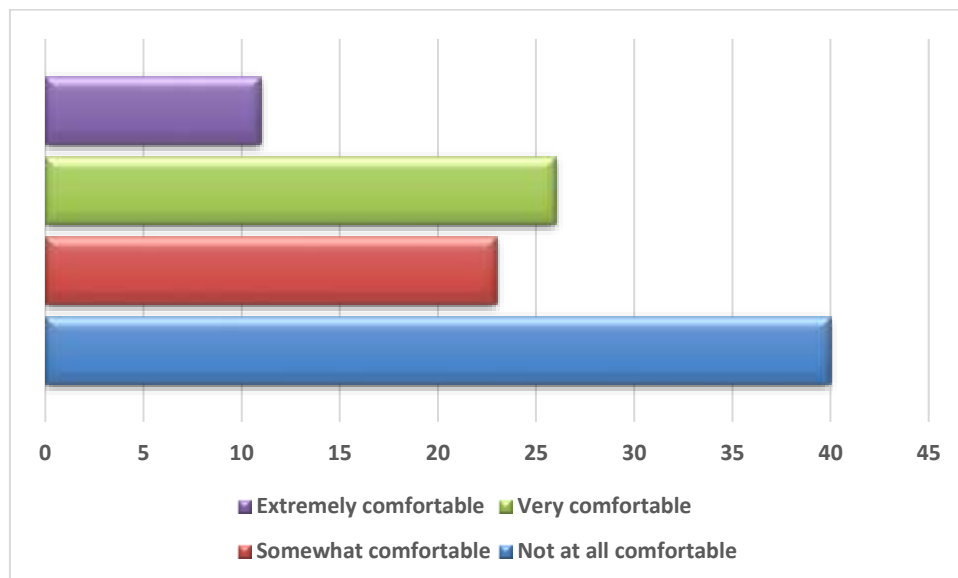


Figure 14. Comfortable to Feel Discussing MH with A Therapist or Counselor Online

Figure 15 presents the confidence of respondents in the privacy and security of their personal information when using OMHR. 41% felt not at all confident, 31% felt confident, 11% felt

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confident, and 17% felt extremely confident. The data shows that a sizable part of respondents is not confident in the protection of their personal information when using OMHR.

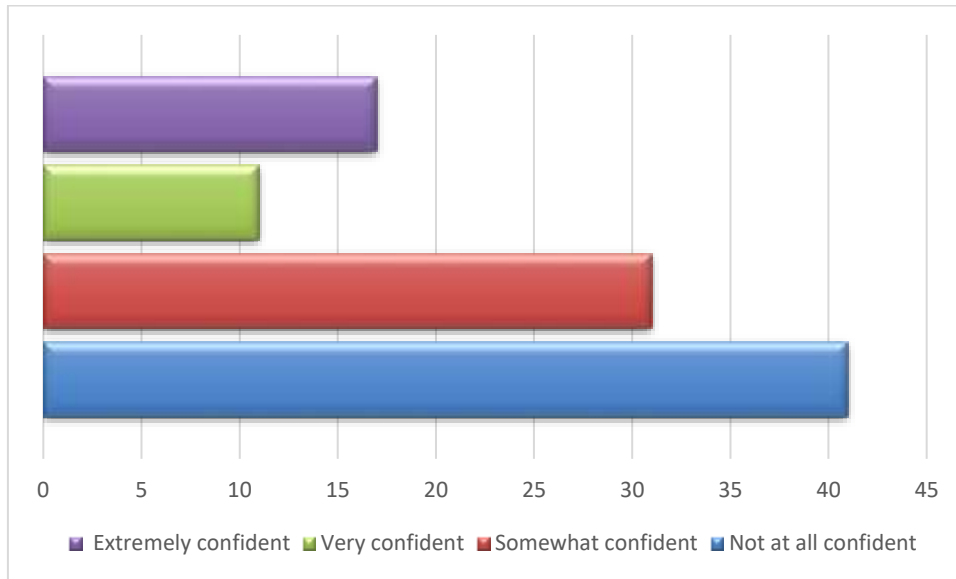


Figure 15. The Privacy and Security of Personal Information Using OMHR

Figure 16 depicts the experiences of respondents with OMHR. 49% reported having no prior experience, 29% had a positive experience once, 17% had a positive experience a few times, and 5% had a positive experience often. The data suggest that many respondents have not had a positive experience with OMHR, with only a small part having had multiple positive experiences.

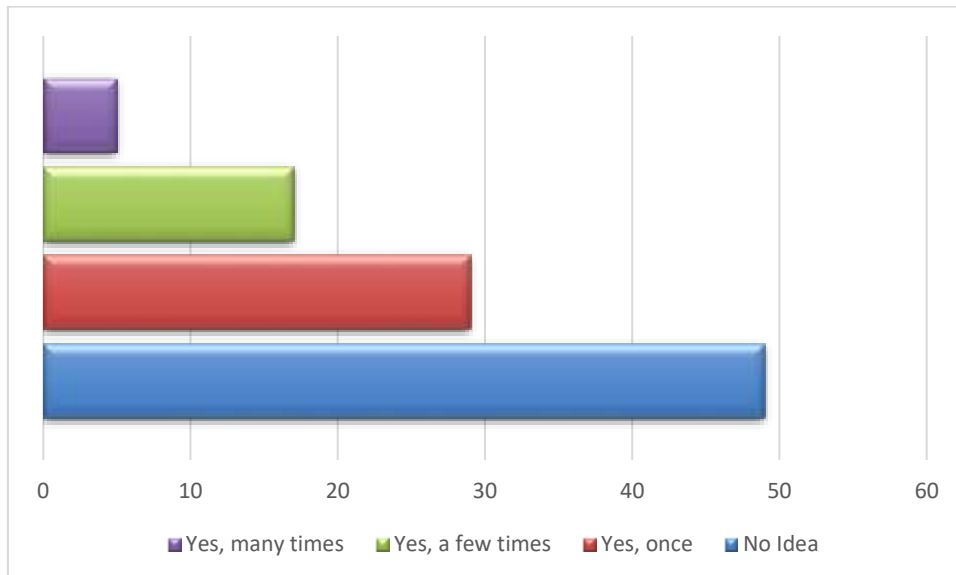


Figure 16. Positive Experience Using an OMHR.

Figure 17 presents the views of respondents on the importance of access to OMHR. 73% reported having no idea, 12% considered it important, 9% viewed it as important, and 6%

considered it extremely important. The data suggests that the respondents are unsure about the importance of access to OMHR, with a minority viewing it as highly significant.

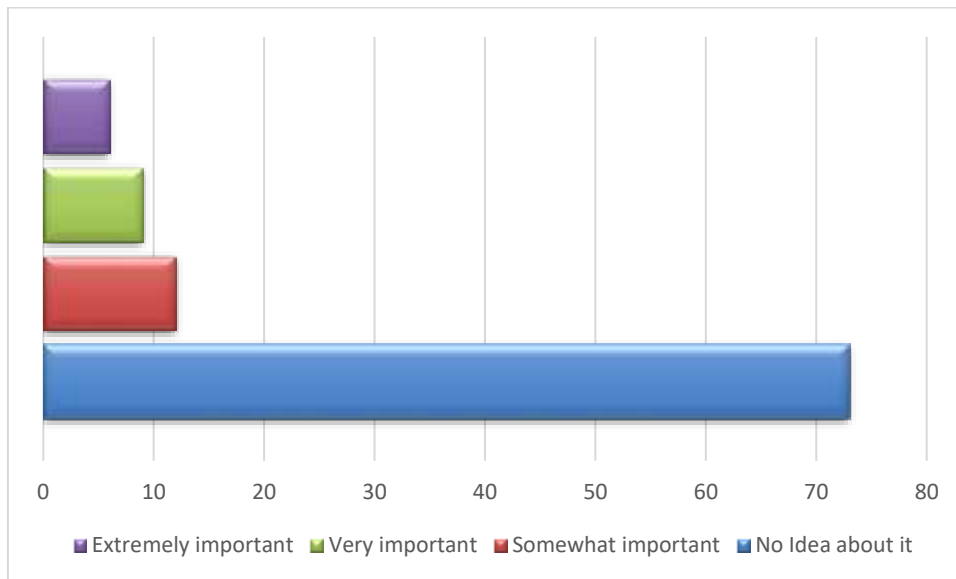


Figure 17. Personal Importance of OMHR

Figure 18 shows the experiences of respondents with OMHR. 94% reported having no prior experience, 4% had a negative experience, 1% had a negative experience a few times, and 1% had a negative experience often. The data suggests that most respondents have not had a negative experience with OMHR, with only a small part showing having had any negative experience.

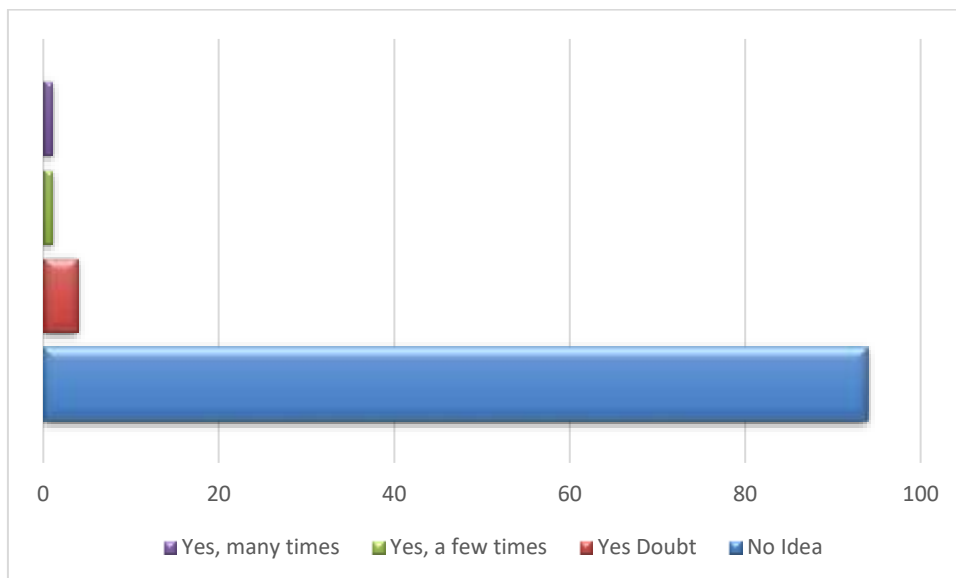


Figure 18. The Negative Experience Using OMHR

Figure 19 illustrates the confidence of respondents in their ability to find and use an online MH resource if necessary. 59% felt not at all confident, 16% felt confident, 13% felt confident, and

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12% felt extremely confident. The data suggests that the respondents lack confidence in their ability to find and use an online MH resource.

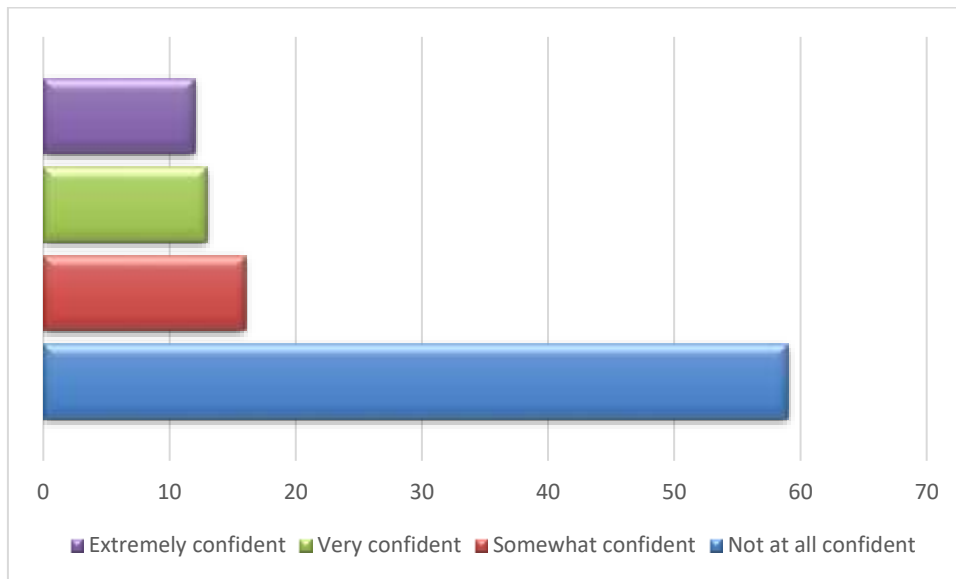


Figure 19. Confidence to Find and Use OMHR if Needed.

Figure 20 displays the level of satisfaction of the respondents with OMHR. 63% showed they have limited understanding, while 7% reported being satisfied. On the other hand, 22% reported being very satisfied and 8% mentioned being extremely satisfied. The results suggest that the respondents have limited knowledge about OMHR and a small fraction are highly satisfied with the resources available to them.

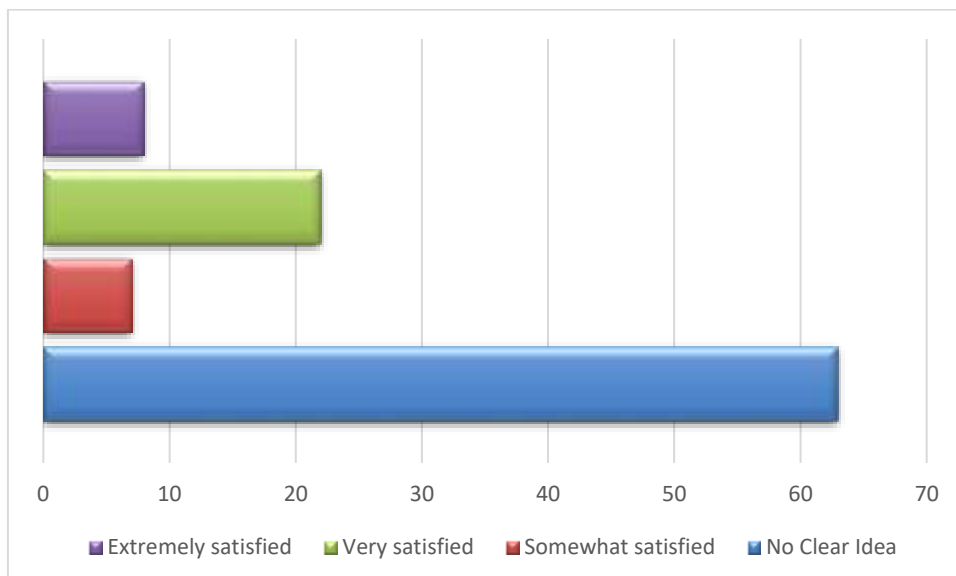


Figure 20. Satisfaction Level About OMHR Currently Available.

Figure 21 presents the advantages of using OMHR, according to the respondents. 88% of them believe that convenience, accessibility, anonymity, and privacy are the biggest advantages.

Only 5% cited convenience and accessibility as the top advantage, 4% mentioned anonymity and privacy, and 13% cited cost-effectiveness as the most significant benefit.

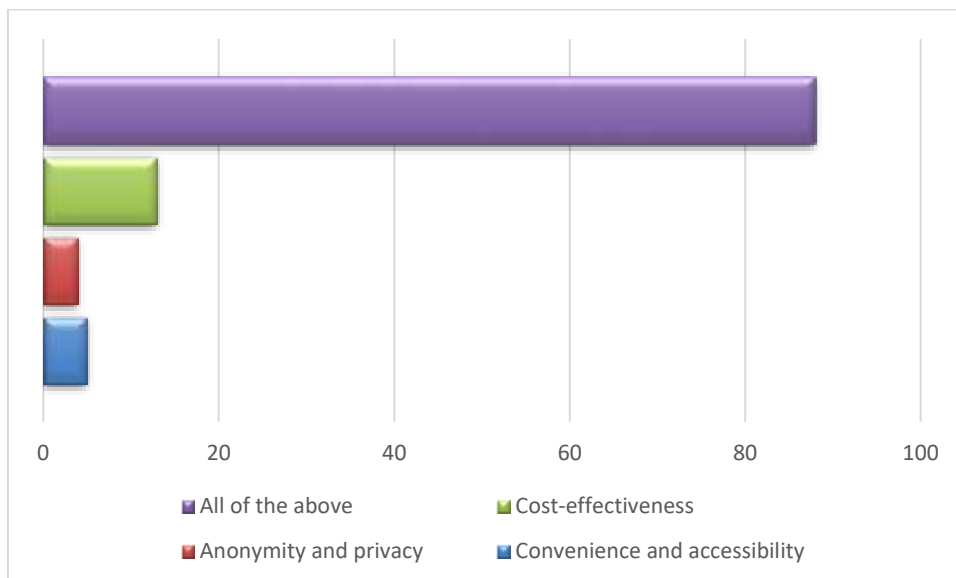


Figure 21. Advantages to Use OMHR

Figure 22 compares the quality of care provided by OMHR to in-person therapy, as perceived by the respondents. 34% reported not knowing, while 7% considered online resources inferior. On the other hand, 24% believed the quality was similar, and 35% considered it superior to in-person therapy. The results suggest that a considerable proportion of the respondents believe that OMHR provides quality care that is either equal to or better than in-person therapy.

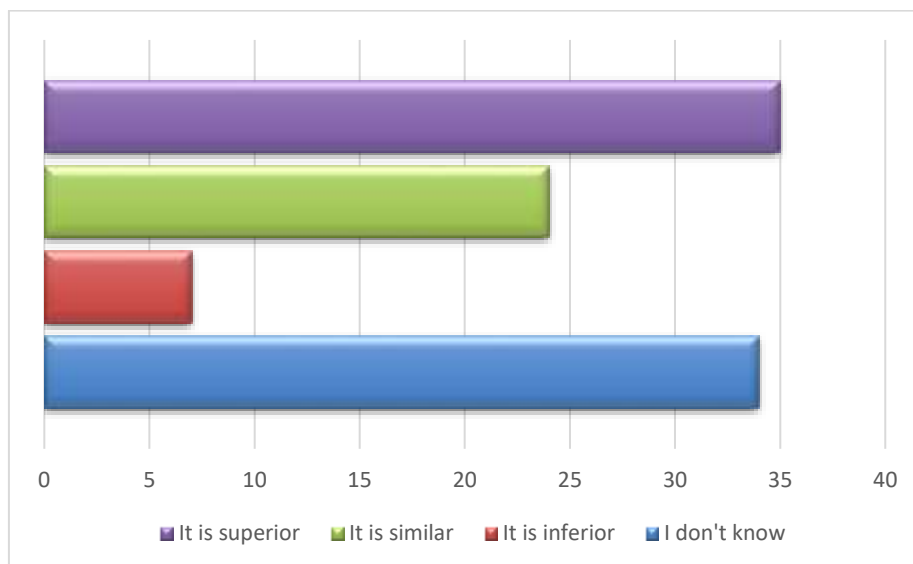


Figure 22. Quality of Care Provided by OMHR Resources Compared to In-Person Therapy.

Figure 23 presents the opinions of the respondents on how OMHR better serve their needs. 82% believed that increasing information and awareness, building trust and confidence, and making resources more accessible and affordable will contribute to improving services. 7%

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suggested increasing information and awareness, 5% emphasized building trust and confidence, and 6% stressed the importance of affordability and accessibility.

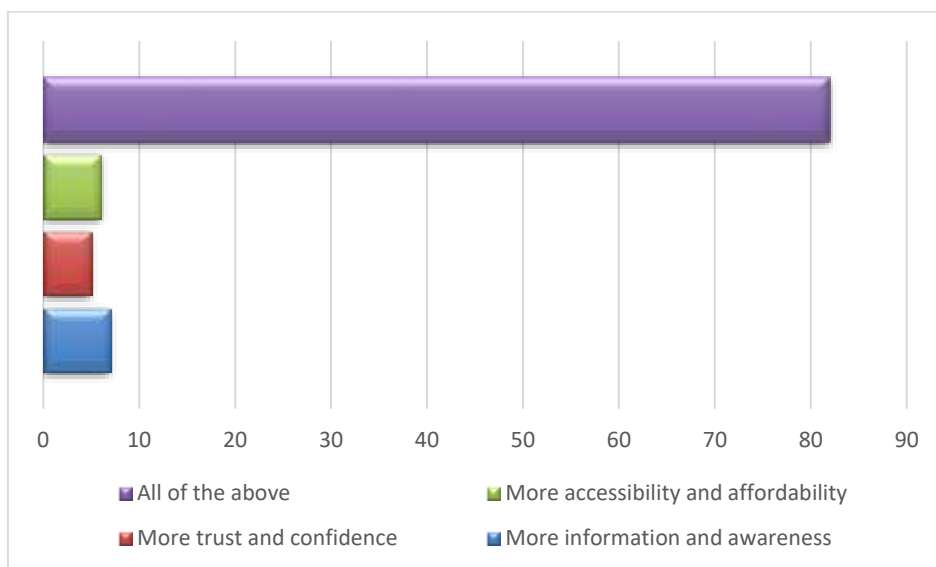


Figure 23. OMHR Improvements to Better Serve the Needs of Users.

Figure 24 reveals the experiences of the respondents in recommending OMHR to others. 74% reported not having recommended any resources, 14% said they have recommended a resource once, 4% a few times, and 8% mentioned having recommended resources many times.

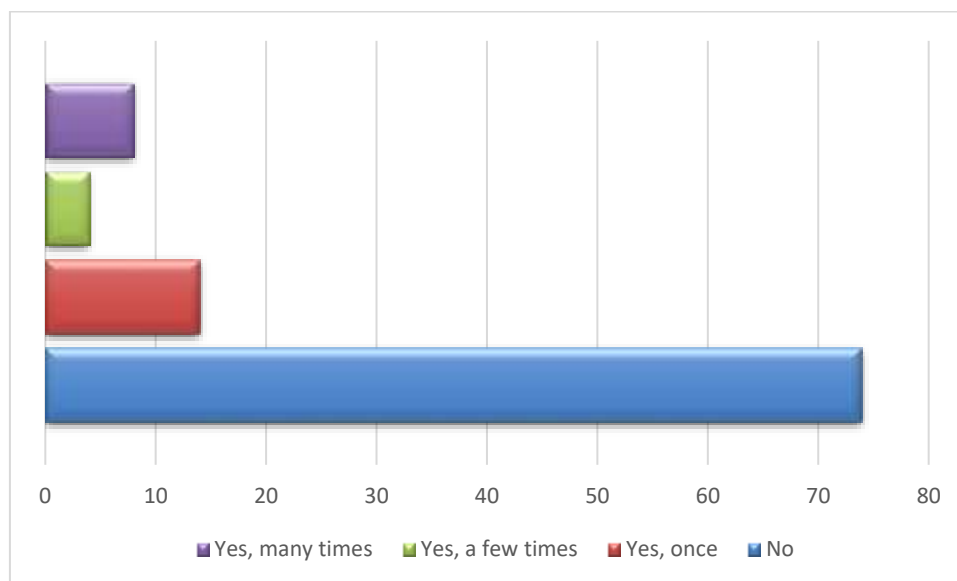


Figure 24. Common Trend to Recommend the OMHR.

Figure 25 shows the likelihood of the respondents using an online MH resource if they were experiencing an MH issue. 37% reported being likely, 17% mentioned being extremely likely, 34% said they would be likely, and 12% reported that they would not be likely to use an online resource. The results suggest that the respondents would consider using an online MH resource if they needed MHS.

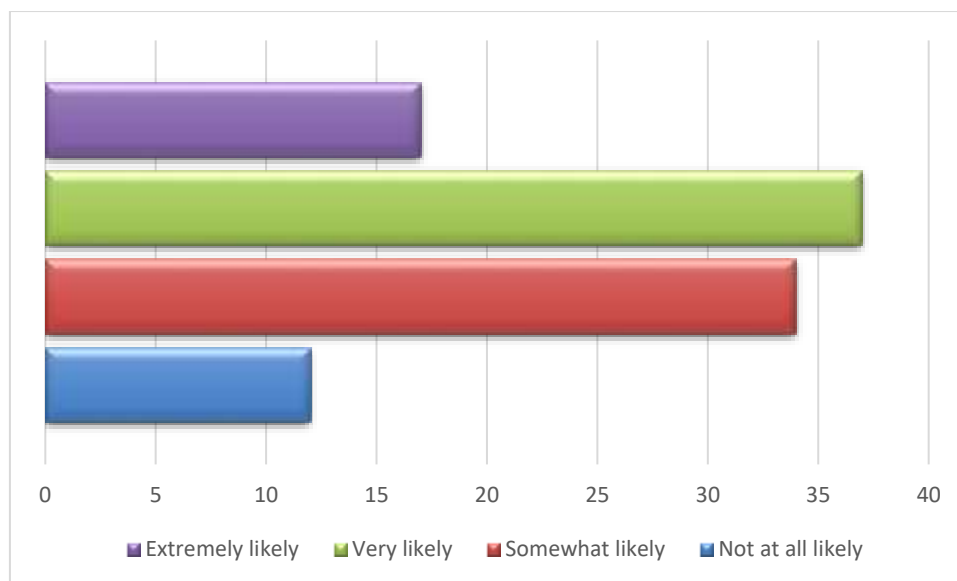


Figure 25. Possibility to Use OMHR while Facing MHI.

Discussion and Conclusion

This research study aimed to examine the use and beliefs of both in-person therapy and OMHR. The findings, depicted in figures 10-24, reveal that many participants infrequently sought in-person therapy and had limited knowledge of OMHR. Many respondents also expressed discomfort in discussing their MH online, a lack of confidence in the privacy and security of personal information, and a limited number of positive experiences with OMHR. However, participants recognized the cost-effectiveness, convenience, anonymity, and privacy as the biggest benefits of OMHR, and believed that the quality of care was either equal to or superior to in-person therapy.

The study suggests that increasing information and awareness, setting up trust and confidence, and making resources more accessible and affordable are ways to enhance the services offered by OMHR. Of the respondents, 61% rarely used in-person therapy, while 77% never utilized OMHR. The primary obstacle to accessing OMHR was a lack of information or awareness, followed by fear of stigma, doubt in effectiveness, and cost or lack of insurance coverage. The comfort level in discussing MH with an online therapist was diverse, with 40% uncomfortable, 23% comfortable, 26% wonderfully comfortable, and 11% extremely comfortable.

A similar pattern shows confidence in the privacy and security of personal information when using OMHR. Most respondents had no prior experience with OMHR, with 94% having no experience, and only 5% having a few positive experiences. A substantial number of respondents were uncertain about the significance of access to OMHR, with 73% having no idea. The satisfaction with OMHR was also diverse, with 63% having no clear idea and only

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22% being very satisfied. Overall, participants believed that the greatest advantages of OMHR were convenience, accessibility, anonymity, and cost-effectiveness. Many respondents considered the quality of care provided by OMHR to be either equal or superior to in-person therapy. To enhance the services offered by OMHR, increasing information and awareness, proving trust and confidence, and making resources more accessible and affordable are the key factors.

The findings of a research study on the accessibility and effectiveness of free DCBT websites and software tools for individuals in developing countries have yielded several recommendations to improve their availability and use. To address the hindrances caused by a lack of technology and inadequate internet connectivity, there is a need to invest in digital infrastructure and technology. To increase digital literacy, individuals need education on the benefits of DCBT. Information campaigns can dispel fears of stigma and judgment associated with MH and increase trust in the effectiveness of online resources. Insurance coverage should cover OMHR and affordable or free alternatives can address cost barriers. To address privacy and security concerns, measures of security are crucial to protect personal information. Cultural barriers are easy to handle through the development of local language resources, culturally sensitive content, and online support groups. The effectiveness and reliability of OMHR are much more assure-able through collaboration with MH professionals. In short, continuous monitoring and evaluation are necessary to assess these efforts' impact and improve the accessibility and use of DCBT resources.

Conclusions

The research aimed to assess the accessibility and usefulness of free digital cognitive behavioral therapy resources for individuals living in developing countries. Through a literature review and qualitative research methods, the study gathered valuable insights into the challenges faced by individuals in accessing DCBT resources such as technology limitations, digital illiteracy, limited internet connectivity, and cultural barriers. The results showed that 61% of participants rarely sought in-person therapy and only 4% often used OMHR, with 68% having limited knowledge about these resources. The biggest barriers to accessing OMHR were a lack of information or awareness (37%), fear of stigma or judgment (24%), distrust in the effectiveness of online resources (22%), and cost or lack of insurance coverage (17%). Additionally, 40% of the respondents felt uneasy discussing their MH online, while 41% were uncertain about the privacy and security of their personal information when using these resources. To enhance the availability and utilization of free digital cognitive behavioral

therapy resources for individuals in developing nations, the research recommends taking the following steps like invest in digital infrastructure and technology to overcome hindrances posed by limited technology and internet connectivity, conducting education campaigns to raise digital literacy and dispel fears of stigma and judgment, expand insurance coverage to include OMHR and offer affordable or free alternatives, implement measures to protect personal information and address privacy and security concerns, develop local language resources, culturally sensitive content, and online support groups to overcome cultural barriers, collaborate with MH professionals to ensure the effectiveness and reliability of OMHR, and regularly monitor and evaluate to continuously improve accessibility and utilization of these resources.

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