

TRENDS IN ONLINE SUPPORT SEEKING BEHAVIOR AMONG COLLEGE STUDENTS
PRE- AND POST COVID-19 PANDEMIC

A thesis presented to the faculty of the Graduate School of Western Carolina University in
partial fulfillment of the requirements for the degree of Specialist in School Psychology

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April 2024

ACKNOWLEDGEMENTS

I would like to thank my committee, Dr. Lori Unruh, Dr. Candace Boan-Lenzo, and Dr. Nathan Roth, for their guidance and assistance throughout this process as well as their continued support throughout numerous unexpected events. Further, I would like to thank all the members of my graduate program, who have continued to support me since I began my journey through graduate school. Finally, I would like to thank my friends and family for their patience and love as I worked through my doubts. Without the support of all the individuals listed completion of this graduate program would not have been possible.

TABLE OF CONTENTS

LIST OF TABLES.....	iv
ABSTRACT.....	v
INTRODUCTION	1
CHAPTER ONE: REVIEW OF LITERATURE.....	2
Help-Seeking Behavior	2
Factors related to help-seeking	3
Help-Seeking Among College Students.....	5
Online Help-Seeking and Mental Health Outcomes.....	7
Online Help-Seeking Behavior	10
Online-Help Seeking Among Young People.....	11
Online-Help Seeking and Seeking In-person Counseling	13
Social Media and Online Help-Seeking Behavior.....	14
Problem Statement	17
CHAPTER TWO: METHODS.....	19
Participants	19
Measure	20
Procedures	21
CHAPTER THREE: RESULTS	23
Levels Of Online Help Seeking Behavior.....	23
CHAPTER FOUR: DISCUSSION.....	26
Limitations	28
Conclusion and Further Directions	29
REFERENCES	30
APPENDICES	36
Appendix A.....	36

LIST OF TABLES

Table 1. Correlation Between Aspects of Digital Literacy and Perceptions of Support Received	24
Table 2. Thematic Analysis of Free Response Section	25

ABSTRACT

TRENDS IN ONLINE SUPPORT SEEKING BEHAVIOR AMONG COLLEGE STUDENTS PRE- AND POST COVID-19 PANDEMIC

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In March of 2020, everyone in the United States had their lives suddenly upended by the announcement of a country-wide lockdown due to the rapid spread of COVID-19. With this announcement, everyone was forced to adapt and find new ways to continue their daily lives without leaving their homes. For many, this meant shifting from an in-person environment to one that was completely digital using virtual networking platforms. This “new normal” resulted in many people losing social and emotional support networks that had existed for years in a pre-COVID world. This present study was conducted to examine trends in online support-seeking behaviors among young adults to determine not only if there was an increase in the frequency of support seeking behaviors using online forums, such as social media, but also an increase in likelihood for individuals who used online forums less frequently in the past. Participants were recruited from college universities and online forums and filled out an online survey. On this survey participants were asked to answer questions related to their confidence in using technology, also known as “digital literacy”. Additionally, participants were asked to answer questions about their use of digital forums to seek support from others before and during/after the COVID lockdowns. Results indicated that there was a significant increase in the use of digital forums to seek support. However, there was not a significant difference in the perception of the effectiveness of the support. Results also indicated that an individual’s “digital literacy” did not impact their ability to receive support. Implications of the results and their impact on future research are discussed.

INTRODUCTION

In early March 2020, the Sars-Cov-2 virus, or as it is more commonly known COVID-19, was officially declared a pandemic by the World Health Organization (World Health Organization, 2020). With this announcement, country-wide lockdowns were enacted, along with new guidelines for social interactions with others. These guidelines restricted access to the traditional social and emotional support networks that most relied on (World Health Organization, 2020). Social and emotional support networks are defined as an interactive activity that allows for the sharing of information and support that results in improved mental health for all involved (Connet, 2005). For many, these lockdowns meant shifting their interactions that provided social and emotional support from an in-person environment to one that was completely digital using virtual networking platforms such as Twitter, Facebook, and Reddit (Chen et al., 2020; Cuello-Garcia et al., 2020; Gao et al., 2020;).

Virtual networking through digital platforms has been shown to improve an individual's mental health at levels similar to in-person interaction (Buehler, 2017; Cohen & Barak, 2013; Oh & Syn, 2015;). In addition to the previously mentioned social media platforms, many have also used online forums addressing specific mental health concerns in order to find more information and resources about their concern as well as to connect with others (Choudhury & De., 2014; Shaw & Grant., 2002; Van Meter et al., 2019;). With COVID-19 generating not only an increased level of engagement on these platforms but also an increase in new users seeking social support via digital means, it is the purpose of this thesis project to determine if young adults are still able to garner support effectively through these means and to identify what factors contribute to their success or failure.

CHAPTER ONE: REVIEW OF LITERATURE

Help-Seeking Behavior

Help-seeking behavior is defined as an action taken by an individual to receive assistance from a professional or nonprofessional to address a variety of difficulties such as academic, social, and mental health problems (Kuhl et al., 1997). Help-seeking actions traditionally have been completed face-to-face, with the individual seeking help contacting a trusted individual to receive advice or services (Kuhl et al., 1997; Mojtabai et al., 2016). In the case of mental health, this usually involves a distressed individual reaching out to a professional therapist or counselor to receive support for their mental health concerns.

Newman (2002) identified four key components necessary for engaging in effective help-seeking behavior. The first component is cognitive competency, which involves knowing when to seek help and what questions to ask in order to receive the most help from that other individual. The second component is social competency, defined as knowing who to seek help from and how to approach that individual for help without breaking any social rules (i.e., do not ask for unnecessary help, do not ask “dumb” questions, do not make a “scene”). The third component is personal motivation, or the desire and motivation to seek help. The final component includes the environmental factors associated with the help-seeking behavior and where it is taking place. For example, a classroom environment that emphasizes mastering the material will lead to students seeking help and asking questions more frequently than a classroom that places the highest priority on test performance.

Factors related to help-seeking

While an individual may be fully competent at seeking help, several factors can prevent them from following through with engaging in effective help-seeking behavior (Masuda et al., 2006; Mojtabai et al., 2016; Ogan et al., 2015). Cultural values are an important factor in determining the likelihood an individual will seek help (Ogan et al., 2015). For example, in certain Latino cultures it is widely accepted that individuals in need can seek support from religious communities or spiritual leaders (Masuda et al., 2006; Mojtabai et al., 2016; Ogan et al., 2015). Further, the stronger an individual's ties are to these cultural values, the more likely they are to seek help from those areas. In contrast, independence, and masculinity, both of which are valued highly in the United States, are values that can deter an individual's desire to seek help (Ogan et al., 2015). Masculinity is typically associated with ideas of competition, achievement, and success through feeling superior to one's competition (Ogan et al., 2015). Independence is typically associated with ideas of autonomy, self-reliance, and individualism, which are often at odds with the traits associated with help-seeking (Masuda et al., 2009; Ogan et al., 2015). Therefore, a society that places greater emphasis on these values encourages individuals to "stand out among the crowd" rather than look for opportunities to "care for one another" (Ogan et al., 2015, pg. 244). Conversely, this implies that when values, such as supporting others, are held in higher importance, individuals from those cultures will be more willing to seek help.

One factor that determines if an individual will eventually seek help is their comfort with discussing health difficulties and their intrinsic motivation to reach out when they are in distress (Mojtabai et al., 2016). This indicates that regardless of a past history of success or failure with help-seeking behavior, should an individual develop an intrinsic motivation to seek help for their

current needs, they are more likely to take the necessary steps to seek help from others (Mojtabai et al., 2016). This willingness to seek help can be affected by internal factors, such as comfort with mental health professionals and exposure to media related to mental health, but it is also affected by contact with others who have sought mental health counseling (Masuda et al., 2009, Mojtabai et al., 2016). Additionally, when the attempts of others to seek counseling for their mental health concerns results in a noticeable improvement to that individual, this in turn decreases the stigma associated with personally receiving mental health counseling (Masuda et al., 2009).

It is also important to consider demographic characteristics when determining the likelihood that someone will seek help, alongside personal factors. Generally, women are more likely to experience fewer barriers to help-seeking, meaning that women feel it is more acceptable for them to seek and receive help from others compared to men (Kuhl et al., 1997; Liddon et al., 2017). However, some research has shown that, despite a difference in barriers or difficulty related to seeking professional mental health, help-seeking rates among men and women are relatively equal (Kuhl et al., 1997; Ogan et al., 2015). This could be explained by men having treatment arranged for them by others or men responding to surveys in a way akin to what their culture expects from them rather than their own personal beliefs (Kuhl et al., 1997; Ogan et al., 2015).

Among both African American and Asian American groups, men tend to have a greater reluctance in seeking help than women (Masuda et al., 2009; Ogan et al., 2015). Generally, minority groups have less experience seeking help from professionals and place a high value on independence and masculine identity; thus, increasing the stigma surrounding seeking help (Masuda et al., 2009; Ogan et al., 2015). This concept is particularly relevant among African

American and Asian American minorities who report higher levels of anxiety and stigma related to mental health help-seeking than their White counterparts (Masuda et al., 2009). This also is related to levels of trust in mental health professionals, which is generally lower among both African American and Asian American minorities (Masuda et al., 2009). Rates of help-seeking behavior from mental health professionals are also low among Latin American groups (Villatoro et al., 2014). One explanation for these lower rates is that seeking help for mental health concerns is highly stigmatized within Latin American communities and due to this, many prefer to seek help within their smaller community, including the churches they attend (Villatoro et al., 2014). Another explanation is that Latin American communities may prefer to utilize familial connections for support over professional mental health services (Villatoro et al., 2014).

Help-Seeking Among College Students

Another group that is important to consider when examining help-seeking behavior is college students, who have shown increased rates of contact with mental health services offered by their respective universities as well as an increased incidence of internalizing mental health concerns such as anxiety and depression (Hunt & Eisenberg, 2010). It is worth noting that, of those students who exhibit signs of depression, only a quarter report receiving treatment, and less than a fifth report receiving treatment for anxiety (Hunt & Eisenberg, 2010). This could be due to several barriers college students face concerning engaging in help-seeking behavior (Cyzy et al., 2013).

In 2020, the Center for Collegiate Mental Health (CCMH) at Penn State University released their annual report in which they analyzed data from the counseling centers of 153 colleges across the United States. In this report, they detailed the demographic breakdown of students who sought counseling for mental health concerns from race and gender identity to

previous trauma as well as the presenting psychological symptoms of their clients. In 2019 and 2020, a total of 172,199 students sought counseling services from their participating institutions. Of those students, roughly 65 percent identified as female, 33 percent identified as male, 2 percent identified as a gender other than male or female, and less than one percent identified as transgender.

Many college students report that they lack the time to seek help for mental health concerns or that they perceive their concerns as “minor” (Cyzy et al., 2013). In other cases, students may seek to solve their problems independently using self-help books or information they find online (Cyzy et al., 2013). This indicates that, although many students recognize that they are in need, their increased value on personal independence is interfering with their motivation to seek help from others. Perhaps most importantly, some students cite discomfort or financial barriers related to seeking help from a professional and turn to friends and family instead (Cyzy et al., 2013). This factor then further interferes with the possibility a student will seek help as they attempt to use other options, which may be less effective, decreasing their chances of immediate success.

Most of the students who sought supportive counseling were White (90%) with Hispanic, African American, and Asian Americans student groups making up the other 10 percent of this group. Of the students who reported reaching out to receive supportive counseling, most were undergraduate students. Interestingly, the frequency of undergraduate students who sought counseling was evenly distributed from freshman to seniors with each group representing roughly 20 percent of the overall sample. With the remaining 20 percent being divided among other groups such as graduate students, part-time students, or those whose college career has

gone beyond the typical “4 years” On average, clients scheduled 5.44 appointments of any kind with most clients only attending a single appointment and others attending up to 145 visits.

The CCMH report also detailed the presenting concerns of students who sought supportive counseling on their campus. Clients were allowed to mark all the concerns that applied to them as part of their reason for seeking supportive counseling, which could range from anxiety to financial concerns. Among college students, the most common concerns were anxiety (~65%), depression (~45%), and stress (~40%). Additionally, clinicians were instructed to choose their top concern (i.e., most concerning symptoms) for each of their clients presenting difficulties. The most prevalent “Top Concerns” were anxiety (~25%), depression (~20%), and relationship problems (~10%).

The CCHM also analyzed trends in the mental health symptoms that clients reported over the past 10 years. From 2010 to 2020, client concerns of depression, generalized anxiety, and social anxiety have trended upward with all three currently being at their highest reported levels. Also, the number of students seeking counseling services who had sought services at another institution increased from 43 percent in 2013 to 60 percent in 2020. Lastly, the prevalence of “threat-to-self” concerns (i.e non-suicidal self-injury, suicidal ideation, and suicide attempts) among students who sought supportive counseling showed no change from the prior year despite having trended downward overall.

Online Help-Seeking and Mental Health Outcomes.

Research has shown that during the lockdowns brought about by the COVID-19 pandemic situation, levels of internalizing mental health disorders increased (Cuello-Garcia et al., 2020; Gao et al., 2020; Kumar & Nayar., 2020). At the forefront of this were the increased levels of isolation that came with these lockdowns in addition to increased exposure to harmful

news through social media (Gao et al., 2020; Kumar & Nayar., 2020). Social media allowed for information regarding the pandemic to be found and exchanged rapidly among millions of users (Cuello-Garcia et al., 2020; Gao et al., 2020). This, in turn, led to new ideas and strategies for coping with the pandemic to be “workshopped” quickly among parties; however, this also led to “infotoxation” or an overload of misinformation/blatantly incorrect news that could be detrimental to a person’s mental health (Cuello-Garcia et al., 2020).

The experience of the COVID-19 pandemic situation has led to increased levels of internalizing mental health difficulties in the general population (Cuello-Garcia et al., 2020; World Health Organization, 2020). It is likely that increased exposure to misinformation or distressing news related to the pandemic on social media and online forums played a contributing role to these difficulties. Despite their role in contributing to the mental health difficulties of many, those same forums can be used to assist in addressing those presenting mental health difficulties (DeAndrea et al., 2012; Selfhout et al., 2009; Shaw & Grant, 2002).

Colleges have been able to use online message boards to connect incoming students, reducing their levels of uncertainty and anxiety around attending a university (DeAndrea et al., 2012). Additionally, messaging close friends online can lead to lower levels of depression and anxiety but can also lower levels of happiness over time (Selfhout et al., 2009). In some cases, an individual’s levels of loneliness and depression can be decreased by meeting someone new online rather than someone they have known previously (Shaw & Grant, 2002).

Using online forums and seeking support online can be effective regardless of the user's age (Cummings et al., 2002; O’Keefe et al., 2011). Adults who have a weaker in-person support network often receive more support digitally and engage with others online more frequently (Cummings et al., 2002). Additionally, online support from others often leads to those who have

received that support to “pay it forward” in helping others dealing with similar concerns (Cummings et al., 2002). “Paying it forward” is particularly beneficial to youth who engage with their peers online, as it allows them to communicate more often and provide their peers with opportunities to learn from each other by sharing similar personal experiences (O’Keefe et al., 2011).

Studies have shown that once an individual has successfully found an online support group through either a professional organization or community forum, their general well-being increases (Barak & Cohen, 2007; Barak et al., 2008). This improved well-being can come in the form of personal empowerment, which increases the likelihood of an individual following through with a recommended intervention for their mental health concern (Barak et al., 2008). In addition, feelings of stigmatization or isolation regarding their mental health difficulties can decrease as they connect with others who have similar concerns (Barak et al., 2008). As an individual becomes more involved with their online support group, the distress they feel related to their mental health typically decreases which can, in turn, improve their feelings of well-being (Barak & Cohen, 2007). In addition, as an individual becomes more actively involved with their online support group with whom they feel a greater deal of support, they will post more frequently which further increases the level of support they feel (Barak & Cohen, 2007).

Despite online support groups having several benefits to their users, there are several caveats as well. The first caveat is that online support groups should not take the place of professional counseling but should be used in conjunction with such supports (Barak et al., 2008). Professional counseling for mental health concerns can provide an individual with specific therapeutic techniques and interventions that can impart lasting change (Barak et al.,

2008). While online support groups can provide some of the same information, they cannot provide support for the individual to the same degree as in-person therapy (Barak et al., 2008).

Online Help-Seeking Behavior

As technology becomes more accessible and prevalent in every household, it has become significantly easier for individuals to find information related to any presenting health concern (Ybarra & Suman, 2006). In the early 2000s, roughly 4 out of every 10 adults and 1 out of every 4 adolescents reported using the internet to seek health-related information (Ybarra & Suman, 2006). Of those individuals who sought health-related information online, roughly half indicated that their findings helped them take better care of themselves (Ybarra & Suman, 2006). Social media has been a significant factor in contributing to the increased use of technology to seek support with Americans spending an average of 2 hours per day on social media alone (Oh & Syn, 2015; Prescott et al., 2019). With health information becoming increasingly available online and social media platforms providing more convenient access to support that was previously exclusively found in-person, many have begun to use digital means to seek help.

There are many factors associated with how an individual seeks support through digital means and how they engage with digital content. One study found that men who use digital means to find support for mental health concerns, such as anxiety, as well as physical health concerns (e.g., smoking cessation, cancer, and need for physical therapy) are more likely to gather and give information related to their concerns (White & Dorman, 2001). This digital behavior aligns with many of the trends seen among in-person help seeking behaviors; with men generally wanting more tangible “tools” to use (Liddon et al., 2017). This often involves making a post asking others for useful information, which they would then later relay to others who had similar concerns (White & Dorman, 2001). Women on the other hand are more likely to look for

and provide encouragement to others with similar concerns to their own (White & Dorman 2001). This indicates a potential want for recognition that they are not alone in their struggles. An example of this type of message would be: “I understand what you are going through,” which can aid in normalizing the experience for the individual seeking help. (White & Dorman, 2001).

Another factor that is often assumed to be associated with the levels at which individuals engage with digital platforms while seeking out support is personality type (Kaur et al., 2014; McIntyre et al., 2015). Introverts are generally more likely to feel comfortable reaching out to others online compared to in-person. One study has shown that introverts are more likely to compulsively use the internet compared to their extroverted peers (McIntyre et al., 2015). This could be due to introverts preferring engaging in more solitary or small group activities as a source of support as well as the growing idea that engaging with others in a digital landscape is considered “real life” experience now (McIntyre et al., 2015). Therefore, it could be assumed more introverted individuals who use the internet more compulsively would also utilize digital mediums to seek help and support from others more frequently than extroverts; but that is not the case (Kaur et al., 2014). Both introverts and extroverts are equally likely to engage in online help-seeking behavior (Kaur et al., 2014).

Online-Help Seeking Among Young People

Online help-seeking is particularly relevant for young people who, thanks to increasing access to digital technology, can easily engage with each other in the virtual sphere. According to data from the Pew Research Center in 2018, 95% of adolescents had access to a smartphone and of those, 45% reported being “constantly online” For many adolescents, particularly those who are “constantly online,” it is likely that the ease of access to social media makes it more enticing to seek support using those platforms instead of relying on face-to-face interactions with

others. Many young adults also report that posting online gives them greater feelings of independence and emotional connection to others (Prescott et al., 2019; Wood et al., 2016;). Along with these feelings of independence and emotional connection, it is also easier for many young people to seek support online rather than face-to-face because of the ease of access that digital platforms provide (Kaur et al., 2014; Prescott et al., 2019;). Although many young adults are using digital means as their primary method of communication with each other, that does not exclude their ability to maintain offline relationships (Trepte et al., 2012). Individuals who serve as moderators by screening and monitoring user-generated content are more likely to form bonds with their fellow members if they meet in the physical world as well (Trepte et al., 2012).

While some research findings show that seeking support digitally does provide a greater sense of both emotional connection to others as well as independence in young people, there are also several drawbacks to seeking help digitally instead of in person. Many adolescents report that they have been victims of cyberbullying and exhibit more signs of depressive affect as a result (Kaur et al., 2014; Wood et al., 2016;). While many adolescents report cyberbullying can occur in “everyday” interactions online, the rates of cyberbullying are much higher when an individual reaches out to seek help. Relatedly, many digital platforms allow users to post anonymously behind a username or false identity. This level of anonymity does allow for users to potentially be more open about the difficulties they are facing and in providing support to others without stigmatization (Kaur et al., 2014; Prescott et al., 2019;). However, that same mask of anonymity makes it easier for users to engage in cyberbullying and attack other members of the digital platform because the likelihood of “real world” consequences is diminished (Kaur et al., 2014; Wood et al., 2016;).

Another key factor in determining a young person's likelihood to seek support online is their relationship with their immediate family and friends (Azmita et al., 2013; Wolak et al. 2003). Support from family and friends is important for a young person's mental health outcomes regardless of if it is provided digitally or in-person (Azmita et al., 2013). Youth who have low levels of communication with their immediate family and high levels of familial conflict are particularly more likely to seek support online (Wolak et al., 2003). This is likely due to a perception that the support they do not receive from their family is more likely to be found elsewhere (Prescott et al., 2019; Wolak et al., 2003).

Online-Help Seeking and Seeking In-person Counseling

Another group that should be considered when discussing the outcomes of digital help-seeking behavior is those who have a history of already receiving supportive counseling. For many individuals who are already receiving therapeutic services, seeking online support can serve to augment the advice provided by mental health professionals or to initially find a counselor (Pretorius et al., 2019; Ybarra & Suman., 2006). However, for young people who seek therapeutic information or services online, there is still often a delay between finding the mental health information they are looking for and beginning in-person services (Van-Meter et al., 2019). In many cases, a young person will digitally search for information regarding a mental or physical health concern as it is more accessible than finding that information in person (Van-Meter et al., 2019). Even if the information a young person gathers indicates that they should seek supportive counseling, they will sometimes wait for as long as 90 weeks after the initial onset of symptoms before reaching out to a counselor (Van-Meter et al., 2019). Although young people may take a long time to make initial contact with a counselor offline, utilizing digital therapeutic services can help provide them with a sense of control that leads to further help-

seeking behavior (Pretorius et al., 2019). This effect has even been shown in individuals who have more severe presentations and symptomology of mental health disorders (Pretorius et al., 2019).

Social Media and Online Help-Seeking Behavior

For many people who are seeking social and emotional support online, social media is a common medium for them to use (Berryman et al., 2018; Sheensa et al., 2015). Social media can be accessed from smartphones, tablets, and computers making it readily available at anytime and anywhere. However, with this growing reliance on social media, concerns have also been growing about the effect social media use has on mental health (Berryman et al., 2018; Sheensa et al., 2015). Of note, a behavior known as “Vaguebooking” in which an individual posts a message that is intentionally unclear or alarming intending to garner attention from their followers, has been linked to loneliness and suicidal ideation (Berryman et al., 2018).

Some studies have shown that the frequency of social media use is a poor predictor of mental health; in other words, the number of times an individual browses social media does not predict negative mental health outcomes (Berryman et al., 2018). However, other studies have shown that as time spent per day on social media increases, emotional well-being decreases regardless of the frequency (i.e., 2 hours spent in one sitting vs. 2 hours spread throughout the day) (Sheensa et al., 2015). Some research has shown that the level of supportive messages an individual receives on a support seeking post tend to remain consistent, regardless of how often the individual seeks support (Berryman et al., 2018; Sheensa et al., 2015). However, because increased social media use can decrease emotional well-being, the individual’s subjective feeling of support decreases as well (Berryman et al., 2018; Sheensa et al., 2015).

The intent behind an individual's post online can vary widely, depending on the individual's needs and the online communities they are a part of (Antheunis et al., 2010; Naslund et al., 2016; Oh & Syn, 2015). One common reason for engaging with others online is to reduce the level of uncertainty surrounding a presenting difficulty or to gain praise and encouragement from others in addressing a presenting concern (Antheunis et al., 2010). Those that share information about their mental health concerns often make such posts to learn more about the topic or to engage with others who have similar concerns (Oh & Syn, 2015). Lastly, an individual who specifically makes a post about a mental health concern often does so to ask others for coping strategies and behavioral interventions that could help them address their presenting concern (Naslund et al., 2016).

Online Help-Seeking on Facebook. Of the available social media sites, some of the most common for individuals to use when engaging in online support-seeking behavior are Facebook, Instant Messengers (IM), and Reddit. (Buehler, 2017; Choudhury & De, 2014; Cohen & Barak, 2013; Wright, 2012). Until recently, Facebook is by far the most popular of all the available social networking sites, as it allows individuals to connect with like-minded groups and friends (Buehler, 2017; Wright, 2012). However, more recently other social media applications such as Instagram in the U.S; and globally WhatsApp, have become more popular. To receive the most perceived support from their peers on Facebook, individuals can engage in several “strategies” such as asking for thoughts and prayers for themselves and their family members or engaging in self-deprecating humor to gain the support they are seeking while avoiding violation of any social rules (Buehler, 2017). Once an individual has engaged in a posting strategy, they will often perceive the most support from those who already share a similar mindset (Wright, 2012).

Online Help-Seeking on Reddit. If someone does not find the structure of Facebook appealing, they may instead turn to the forums of Reddit to seek support (Choudhury & De, 2014). Most likely, they will find a forum dedicated to a specific mental health concern such as “depression” or “anxiety” where supportive posts are provided. These forums often include helpful techniques to use and general supportive feedback from others dealing with similar concerns. Reddit allows users to create an anonymous profile which means that any information they post cannot be directly linked back to that individual and their private life by everyday users. This allows for users to engage in greater levels of self-disclosure without fear of retribution or association from others in their in-person social circles. In turn, the feedback they receive is often higher quality and more personal than that which they receive on other forms of social media (Choudhury & De, 2014). Many Reddit forums operate similarly to mental health websites intended to provide support for a specific mental health concern (Choudhury & De, 2014). However, Reddit is not without its drawbacks particularly related to its user anonymity and possible lack of moderation (Choudhury & De, 2014; Pretorius et al., 2019). Given that Reddit users can create posts using anonymous usernames, an individual can make a post under the guise of being a mental health professional even though they have received no formal mental health training (Pretorius et al., 2019). Should one of these posts gain visibility, it can also lead to the rapid spread of misinformation or blatantly harmful information across the forum or the entirety of Reddit. Additionally, some detractors can create stigmatizing or intentionally harmful posts that target individuals with mental health concerns, which might exacerbate their harmful behaviors and difficult thoughts (Pretorius et al., 2019).

Online Help-Seeking through WhatsApp, Telegram, or Direct Messaging. In contrast, some individuals may avoid social media and instead turn to directly messaging friends,

family, and known social groups online through instant messaging (Cohen & Barak, 2013). Research has found that prolonged periods of “naturalistic” texting, which mimics in-person conversations, can reduce stress levels and improve the overall “mood” of those who participate in these online conversations (Cohen & Barak, 2013). Instant messaging provides a space for individuals to have an intimate conversation that is shared between the two participants without the fear of being overheard or seen by others, which is likely a contributing factor to its effectiveness (Cohen & Barak, 2013). In addition, Instant Messaging allows individuals to feel connected to others without the need for meeting in person, which makes using Instant Messaging services more enticing (Bardi & Brady, 2010). Instant messaging also allows for individuals who experience shyness or social anxiety to message others with ease, without the need to respond immediately that characterizes most face-to-face interactions (Bardi & Brady, 2010).

Problem Statement

The current study aims to expand the research regarding the use of social media and other online platforms to seek social and emotional support during the COVID-19 pandemic, particularly among college students. Research gathered from the Center for Collegiate Mental Health over the past 10 years has shown that college students have demonstrated both an increase in mental health concerns and an interest in receiving mental health services. This trend has likely been exacerbated by the COVID-19 pandemic, as individuals have been removed from their typical, in-person, social support networks and instead used one that is fully digital (Chen et al., 2020; Cuello-Garcia et al., 2020; Gao et al., 2020;). Findings suggest that social and emotional support can be obtained using digital platforms such as Facebook, Reddit, and Instant messenger and can lead to an improvement in an individual’s mental health (Buehler, 2017;

Cohen & Barak, 2013; Oh & Syn, 2015;). This study will add to the literature by examining how digital media use changed during and after the COVID-19 pandemic in the duration and frequency of use among college students. Additionally, this study, will help examine some of the barriers that exist for individuals seeking to use digital media as a means for receiving social support. The following research questions will be asked:

Research Question: Did levels of online help-seeking behaviors in college students increase during the COVID-19 pandemic, compared to pre-pandemic levels?

Research Question: How effective was the support college students received during the pandemic, compared to pre-pandemic levels?

Research Question: Does online help-seeking behavior vary based on the demographic characteristics of the individual?

Research Question: What resources exist that assist in gathering support from others digitally?

Research Question: What barriers exist to effectively gathering support from others digitally?

CHAPTER TWO: METHODS

Participants

For this research project, participants were recruited primarily from Senior Seminar Psychology courses from Western Carolina University in North Carolina. This group was selected because they began their college experiences in 2020 during the initial stages of the COVID-19 pandemic and now, four years later, are concluding it after the numerous changes to college life as a result. Therefore, many of them have experienced first-hand the numerous changes that came about from the pandemic, including the impact on social-emotional wellbeing. To help supplement the sample, the survey was posted on social media sites such as Reddit, Facebook, and Discord which are likely to have high populations of college students. Demographic data collected included participants age, gender, race/ethnicity, years of college experience, and level of personal or familial income.

In total, 24 members participated. All participants indicated that they were between 18 and 29 years old. Half indicated that they were between the ages of 18-24 and the other half indicated that they were between 25 and 29 years old. Gender breakdowns indicated a total of 10 female participants and 12 male participants, with 2 identifying as “other”. The self-reported race/ethnicity of participants indicated that all identified as “white/Caucasian”. Regarding college experience, 71% percent of the population indicated that they were currently classified as “seniors” or were currently in their 4th year of undergraduate education. The remaining 29% of respondents indicated that they were “super” seniors, or students who are classified as seniors but have been enrolled in college for longer than 4 years.

Participants were also asked to indicate levels of personal/familial income. Overall, 25% percent indicate a total less than \$32,000, 25% indicate a total between \$32,00 and \$53,000. 42% percent indicated levels of income between \$53,000 and \$106,000. The remaining 8% percent indicated total income levels between \$106,000 and \$373,000 or above.

Measure

The survey used in this research was developed by the researcher using the Qualtrics Survey platform. The survey consisted of 28 questions divided into three different content areas (Appendix A). Before responding to the survey, participants were provided with a brief introduction as well as an opportunity to review more in-depth informed consent documents. After indicating they had read the forms, participants were shown various resources they could contact should they experience any discomfort during the survey process.

The first section of the survey asked the participants to answer demographic questions related to their gender, race, ethnicity, age, a rough estimate of their individual or family income level, and current class standing in college.

The second section of the survey was titled “Online Media Use” and was developed specifically for this study. This series of questions were intended to assess the participants “digital literacy”. Participants were asked to respond to 5 multiple choice questions which asked about the availability of technology (i.e smartphones, tablets, laptops) to the participant as well as how often they utilized those devices to access the internet through mediums such as social media or video games. Additionally, participants were asked to indicate how confident they were in their ability to find accurate information about a topic online. Lastly, participants were asked to indicate what digital media platforms they regularly use such as Facebook, Twitter, or Reddit.

The third section of the survey is titled “Online Help Seeking” and utilized questions that were adapted from the Young People’s Help-Seeking Questionnaire and the Lubben Social Network Scale (Rickwood et al., 2005, Lubben et al. 2006). These questionnaires were originally developed to examine how young people seek support via in-person means and their perceptions of the support they received. For those questionnaires, participants were asked questions regarding who they sought support from, how often they did so, and how helpful they perceived the support to be. Additionally, participants were asked how comfortable they felt talking to others about personal matters such as their mental health concerns. For the purposes of this study, the survey was adapted to ask participants to respond to similar questions but regarding their online help-seeking behavior.

At the end of the survey, there was also an optional free-response section where participants were asked to share with the researcher any thoughts regarding their experience with online help-seeking.

Procedures

Two different procedures were used to recruit participants for this research project. The first recruitment procedure involved contacting instructors of “senior seminar” courses. The instructors of these courses were asked to share the request for participation and link to this survey with students in their courses. The students were told that to participate they just needed to go to the link to access the survey and once they had started the survey they could stop at any time. The second recruitment procedure involved posting information about the survey on social media sites such as Reddit, Facebook, and Discord which are likely to have high populations of college students. In the social media post, potential participants were informed about the desired demographic criteria (i.e college students) as well as the purpose of the study and were informed

that they could stop at any time. In both recruitment methods, respondents were then directed to a survey administered digitally via Qualtrics. Once the survey window had closed, information from the completed surveys was downloaded into an excel file for analysis. Analyses included: a t-test comparison of online help-seeking behaviors, an analysis of variance among prior online media use and the utilization of digital means to seek help, as well as correlational comparisons between perceived effectiveness and factors related to digital literacy. Finally a thematic analysis was conducted based on participants responses to the final free response question.

CHAPTER THREE: RESULTS

Levels Of Online Help Seeking Behavior

A paired samples t-test was conducted to compare the overall level of pre-pandemic (Before March 2020) online help-seeking behaviors to current levels of the same behaviors, now that norms around COVID-19 have stabilized. Levels of pre-pandemic technology use indicated that most participants would occasionally utilize digital methods to seek help $M = 2.74$, ($SD = 1.03$). However, after the pandemic, the overall level of technology use to seek help increased $M = 3.08$ ($SD = 1.14$). When these two scores are compared, the post-pandemic responses were significantly higher than the pre-pandemic responses, in terms of digital help-seeking ($t(23) = 2.13$, $p = 0.04$). However, the level of perceived support, or how effective the individual believed the help they received to be, was not significantly different pre-pandemic $M = 3.70$, ($SD = 0.86$) compared to current levels $M = 3.48$, ($SD = 0.93$). With average levels of perceived support during the post-pandemic timeframe being lower than pre-pandemic levels ($t(23) = 1.48$, $p = 0.15$).

A one-way Factorial Analysis of Variance (ANOVA) was utilized to examine whether significant differences exist in the utilization of digital means to seek-help based on prior online media use. Factors related to online media use include access to digital devices, access to the internet, and time spent online. Analysis revealed that there was not a significant difference between individuals who spend more time online initially compared to those who did not [$F(1,24) = 0.8$, $p = 0.45$]. Post hoc comparisons using a t-test with Bonferroni's correction indicated that the mean scores among all levels of prior online media use did not significantly differ which further indicates that the level of time spent online initially did not differ.

A correlation was used to examine if there was a relationship between the effectiveness of the support an individual gathered after the pandemic from their social support network and certain factors related to digital literacy. Specifically, a correlation was run between the amount of time an individual spends online, their level of access to the internet and their familiarity with technology. Results showed that there was not a significant correlation between familiarity with technology and the level of perceived support $r(22) = 0.05, p = .817$. Further, regarding access to the internet $r(22) = 0.17, p = .439$ and time spent online $r(22) = 0.2, p = .350$ there was no significant correlation

Table 1.

Correlation Between Aspects of Digital Literacy and Perception of Support Received

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4
1. Time spent online	24	3.30	1.12	--			
2. Level of access to the internet	24	3.82	0.96	0.57	--		
3. Familiarity with technology	24	3.52	1.14	0.45	0.36	--	
4. Effectiveness of support obtained	24	3.74	0.90	0.17	0.20	0.05	--

Finally, in order to examine potential changes among respondents a thematic analysis of responses given for the final question of the survey (Appendix A). Specifically, the analysis looked at trends in respondent’s thoughts regarding virtual therapy and seeking help from friends and family virtually. Overall, less than half of respondents provided input on this section. Regarding virtual therapy, several respondents indicated that virtual therapy was a better option for them as it allowed for more flexibility and increased their overall levels of comfort. However, one respondent mentioned that virtual therapy was less beneficial to them due to environmental

distractions. Regarding reaching out to others, several respondents mentioned that during the COVID pandemic their social groups had to adapt to how they communicated with several of their support methods increasing in frequency. Further, this change in communication helped them to realize that their family was going through similar levels of emotional fatigue.

Table 2.

Thematic Analysis of Free Response Section.

Theme	<i>n</i> of participants contributing (<i>N</i> =6)	Sample Quote
Theme 1: Accessibility of virtual therapy	4	“I had never head of tele-health before the pandemic. The service would have helped me from switching my therapist when coming to college.”
Theme 2: Connecting with friends and family	3	“[I] often found that friends & family were dealing with the same level of burnout or emotional fatigue...”

CHAPTER FOUR: DISCUSSION

The COVID-19 pandemic had wide and varied effects on how individuals lived their lives. For many they had to find new ways to interact with their friends and family to ensure not only their health and safety but also their continued support of one another. For many, this meant changes from meetings that were held in-person to other mediums, including through digital means. This meant that social support networks, which are used to seek support from others, needed to be updated to accommodate these changes. One group for which these challenges were especially noticeable is current undergraduate college students, particularly those who started their college careers during the most impacted years of the COVID-19 pandemic. The purpose of this study was to examine if the pandemic resulted in changes to their use of digital media to seek support from their social networks. Further, the study also sought to determine if that same support they sought online was potentially more effective.

Results indicated that, among college students, there was an increase in the use of digital mediums to seek the support of others post-pandemic. This result reflects growing national trends in the increased use of online mediums, especially social media, to connect with others (McIntyre et al., 2015; Oh & Syn, 2015; Prescott et al., 2019). Although there was an increase in the use of digital mediums among college students to seek support, there was not a significant change in how effective they perceived that level of support pre-pandemic compared to during and after the pandemic. However, responses generally indicated that individuals found the support they received to be helpful, it was just no more effective than previous attempts. Previous research indicated that many young people have continued to use digital means effectively to seek support from others online (Prescott et al., 2019; Wood et al., 2016;). However, these results could potentially suggest that college students did not necessarily find

new or “better” ways to get support from their online social networks but rather relied on those networks more as their other means of seeking support were changed due to the pandemic.

While college students may be increasingly utilizing digital means to seek support from others, there are several factors that impact a person’s ability to garner effective support online. These include personality traits, cultural background and other demographics (Masuda et al., 2006; Mojtabai et al., 2016; Ogan et al., 2015). This study sought to examine if participants familiarity with technology, sometimes called “digital literacy”, affected how often they attempted to gather support from their social networks online. Based on an analysis of potential variations, an individual’s digital literacy did not impact their ability to obtain support online. Respondents varied somewhat in their overall digital literacy with all participants falling evenly between somewhat comfortable using the internet and extremely confident. While there was not a significant variation in their ability to obtain support online, in general, individuals who spent more time online often relied more heavily on seeking support online.

Although there were no significant differences between levels of digital literacy and the frequency with which an individual sought support from their support groups online, this study also examined the relationship between post-pandemic online level of support and various factors such as familiarity with technology, time spent online, and access to the internet this. No relationship was identified in this study. This is potentially notable as other studies have examined the effects of the time an individual spends online, especially on social media, and their overall mental health outcomes (Berryman et al., 2018). This lack of a correlation could further be explained in relation to studies which showed that it matters more how much time an individual spends online, rather than how many “sessions” of online time an individual uses throughout the day (Sheensa et al., 2015).

Limitations

Although there are some notable pieces of information gathered from this study, there are also numerous limitations which impact their generalization to college students. The most important limitation is the incredibly small sample size of exclusively undergraduate seniors. While this group has likely had much of their college experience impacted by the COVID-19 pandemic, this means that their experiences are potentially not representative of the whole student body. Further, respondents were determined to be exclusively from North Carolina, despite attempting to reach a potentially larger population.

Another notable limitation is the amount of time that has elapsed since the initial COVID-19 outbreak and lockdowns. While participants were asked to respond primarily based on their experiences during the lockdowns, there is no guarantee that they kept this frame of reference during their response to the third section of the survey. Further, there are also no guarantees that changes they made to their online help-seeking behaviors during the initial lockdowns have maintained during the following years as the lockdowns have lifted. Lastly, given the multiple years that have passed, it is possible that trends and changes in use of digital media are part of a natural change college students experience as they go through their college experiences.

The last noted limitation is that the measure used for this study, while based on other scales, has not been used outside of this study. While the initial measure used could show the effectiveness of in-person social networks, there is no guarantee that this would apply to digital social networks.

Conclusion and Further Directions

The results of this study support the growing trends, specifically among young people related to the increase in the use of digital mediums to connect with their social groups for multiple reasons. In the case of this study there was an increase in the use of digital mediums to seek help pre-pandemic compared to post-pandemic. However, when individuals found that support, there was no significant difference in the perceived effectiveness of that support. Although this was the case, it was noted that most respondents indicated that the support they received was helpful to them. Furthermore, various demographic characteristics did not alter an individual's ability to seek support from others. This was also the case for various aspects of “digital literacy”, or an individual’s understanding of the use of online spaces. In other words, based on the information gathered, during the pandemic more people, from all walks of life began to turn to digital mediums more often to connect and seek the support of others.

While these results indicate that most college students sought support online and were relatively effective in gathering support that they perceived to be beneficial, there are several areas that could benefit from further examination. For example, there have been other studies that show that overuse of social media can have a detrimental effect on the mental health of those who use it. Many participants in this study indicated that they used social media as a way to connect with their friends and family. Therefore, it could be beneficial to examine if there is a difference in the mental health outcomes of those who use social media to connect with their support network compared to those who use it in other ways. Additionally, several respondents indicated that they had attempted virtual therapy and that it gave them access to support avenues they did not have previously. Future research could examine changes in experience with, and perceptions of, seeking professional mental health support digitally.

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APPENDICES

Appendix A

Introduction

Thank you for your interest and participation in the survey. Please review the following informed consent form. Note that your responses are anonymous and that you can choose to quit the survey at any time. Clicking "Next" indicates that you have read the document and consent to participate.

Safety Statement

We anticipate that your participation in this survey presents no greater risk than everyday use of the Internet. However, some of the questions we will ask you as part of this study may make you feel uncomfortable. You may refuse to answer any of the questions, take a break or stop your participation in this study at any time.

Should you feel uncomfortable or need support from a professional please consider the following resources:

Western Carolina University students can reach out to the CAPS center at 828-227-7469

The National Crisis Line is also available at 988.

North Carolina Residents can Call or Text hopeline-nc at: 877-235-4525.

Demographic Information

1. Please indicate your current college class standing
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. "Super Senior" (>4 years at a 4 year university)
 - f. Graduate Student
 - g. I am not currently enrolled in a college/university
2. Please indicate your age
 - a. 18-24
 - b. 25-29
 - c. 30-34
 - d. 35-40
 - e. 40+
3. Please indicate the gender you identify as
 - a. Male
 - b. Female
 - c. Other (Please Specify)
4. Please indicate your race/ethnicity (Based on the 7+2 format for reporting data to the U.S. DoE)
 - a. American Indian or Alaska Native

- b. Asian
 - c. Black or African American
 - d. Hispanic or Latino or Spanish Origin of any race
 - e. Native Hawaiian or Other Pacific Islander
 - f. White
 - g. Two or more races
5. Please Indicate your Ethnicity
- a. Hispanic or Latino or Spanish Origin
 - b. Not Hispanic or Latino or Spanish Origin
6. Please indicate your familial income level or personal income level if you live independently (Based on Pew Research Centers designation of class)
- a. Less than \$32,000
 - b. \$32,000 - \$53,000
 - c. \$53,000 - \$106,000
 - d. \$106,000 - \$373,000
 - e. More than \$373,000

Online Media Use

1. How many digital devices (Laptop, Tablets, Computer, Smartphone, Gaming Systems etc.) do you own and use regularly?
 1. 0
 2. 1-2
 3. 3-4
 4. 5-6
 5. 7+
2. Growing up, how easy was it to access the internet from your home?
 1. Very Difficult/I did not have internet access at home
 2. More Difficult than Easy
 3. Neither Easy nor Difficult
 4. More Easy than difficult
 5. Very Easy
3. How best would you describe the Wireless Internet currently at your place of residence?
 1. I do not have access to wireless internet
 2. Dial Up/DSL or slow and spotty connection
 3. Broadband or standard internet connection
 4. Satellite Connection
 5. Fiber or High-Speed Connection
4. On average, how much time do you spend online (on social media, surfing the web, playing video games, etc.) each day?
 1. Less than one hour
 2. 1-3 hours
 3. 3-5 hours
 4. 5-7 hours
 5. 7+ hours
5. Please indicate all the following digital media sites you have accounts for or regularly use.

1. Facebook
 2. Twitter
 3. Instagram
 4. Snapchat
 5. Reddit
 6. Tumblr
 7. TikTok
 8. Pinterest
 9. Gaming (Steam, Epic Games Launcher, Xbox Live, etc.)
 10. Video Sharing/Streaming sites (Youtube, Twitch, Caffeine, etc.)
 11. MultiMedia software (Discord, Skype, etc.).
 12. Messaging Apps (WeChat, GroupMe, WhatsApp, etc.)
 13. Other (Please Specify)
6. Describe the level of confidence you have in your ability to find accurate information on a topic online
1. Extremely Confident
 2. Highly Confident
 3. Moderately Confident
 4. Slightly Confident
 5. Not Confident

Online Help Seeking

Please respond to the following questions based on your digital help-seeking experience during the pre-pandemic years (between 2015 and 2020).

1. Please indicate the people who you sought help from, using digital means (text message, social media, email, virtual meeting, etc.), when you were experiencing personal or emotional difficulties.
 - a. Partner (e.g significant boyfriend or girlfriend)
 - b. Friend (not related to you)
 - c. Parent
 - d. Other relative
 - e. Mental health professional (e.g counselor, psychologist, psychiatrist)
 - f. Phone help line (e.g Lifeline, Suicide Prevention Hotline)
 - g. Family Doctor
 - h. Teacher
 - i. Social Media Followers
 - j. Other (Please Type in your response)
 - k. I would not seek help from others
2. How many family members/relatives that you feel comfortable talking to about personal matters did you see or hear from at least once a month?
 - a. None
 - b. One or two
 - c. Three or four
 - d. Five through Eight
 - e. Nine or More

3. How many friends that you feel comfortable talking to about personal matters did you see or hear from at least once a month?
 - a. None
 - b. One or two
 - c. Three or four
 - d. Five through Eight
 - e. Nine or More
4. If you needed support, how often did you use digital means to seek help from others when you were experiencing personal or emotional difficulties (e.g., posts on social media, texts to a friend, virtual meeting, etc.)?
 - a. 1 Never
 - b. 2 Occasionally
 - c. 3 Sometimes
 - d. 4 Often
 - e. 5 Always
5. If you sought help online, what was your preferred method for seeking help from others digitally when experiencing personal or emotional difficulties?
 - a. Online support groups
 - b. Social Media Posts
 - c. Virtual Meetings with a mental health professional
 - d. Virtual Chats with friends and family
 - e. Other (Please Specify)
 - f. I did not seek help from others digitally.
6. When you were provided with help from others via digital means, such as supportive messages on your social media post or time to chat, how effective was the help others provided?
 - a. 1 Extremely Unhelpful
 - b. 2 Somewhat Unhelpful
 - c. 3 Neither Helpful nor Unhelpful
 - d. 4 Somewhat Helpful
 - e. 5 Extremely Helpful
7. Did you ever seek help from a mental health professional using digital means/tele-health?
 - a. Yes
 - b. No
8. How Helpful was the tele-health visit to the mental health professional?
 - a. 1 Extremely Unhelpful
 - b. 2 Somewhat Unhelpful
 - c. 3 Neither Helpful nor Unhelpful
 - d. 4 Somewhat Helpful
 - e. 5 Extremely Helpful
 - f. I did not schedule a tele-health visit

Please respond to the following based on your digital help-seeking experience during and after the COVID-19 pandemic (2020-2024), particularly during the lockdowns (March 2020 – July 2020).

1. Please indicate the people who you sought help from, using digital means (text message, social media, email, virtual meeting, etc.), when you were experiencing a personal or emotional difficulties (text message, social media, email, virtual meeting, etc.).
 - a. Partner (e.g significant boyfriend or girlfriend)
 - b. Friend (not related to you)
 - c. Parent
 - d. Other relative
 - e. Mental health professional (e.g counselor, psychologist, psychiatrist)
 - f. Phone help line (e.g Lifeline, Suicide Prevention Hotline)
 - g. Family Doctor
 - h. Teacher
 - i. Social Media Followers
 - j. Other (please specify)
 - k. I would not seek help from others
2. How many relatives that you feel comfortable talking to about personal matters did you see or hear from at least once a month virtually?
 - a. None
 - b. One or two
 - c. Three or four
 - d. Five through Eight
 - e. Nine or More
3. How many friends that you feel comfortable talking to about personal matters did you see or hear from at least once a month?
 - a. None
 - b. One or two
 - c. Three or four
 - d. Five through Eight
 - e. Nine or More
4. If you needed support, how often did you use digital means to seek help from others when you were experiencing personal or emotional difficulties (E.g., posts on social media, texts to a friend, virtual meeting, etc.)?
 - a. 1 Never
 - b. 2 Occasionally
 - c. 3 Sometimes
 - d. 4 Often
 - e. 5 Always
 - f. I did not seek support online
5. If you sought help online, what was your preferred method for seeking help from others digitally when experiencing personal or emotional difficulties?
 - a. Online support groups
 - b. Social Media Posts
 - c. Virtual Meetings with a mental health professional
 - d. Virtual Chats with friends and family
 - e. Other (Please Specify)
 - f. I did not seek help from others digitally.

6. When you were provided with help from others via digital means, such as supportive messages on your social media post or time to chat, how effective was the help others provided?
 - a. 1 Extremely Unhelpful
 - b. 2 Somewhat Unhelpful
 - c. 3 Neither Helpful nor Unhelpful
 - d. 4 Somewhat Helpful
 - e. 5 Extremely Helpful
 - f. I did not get help this way
7. Did you ever seek help from a mental health professional using digital means/tele-health?
 - a. Yes
 - b. No
8. How Helpful was the tele-health visit to the mental health professional?
 - a. 1 Extremely Unhelpful
 - b. 2 Somewhat Unhelpful
 - c. 3 Neither Helpful nor Unhelpful
 - d. 4 Somewhat Helpful
 - e. 5 Extremely Helpful
 - f. I did not schedule a tele-health visit

Additional Questions

1. Please provide any additional thoughts you would like to share with the researcher regarding your experience with online help-seeking.