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Exploring Opportunities to Support Mental Health Care Using Social Media: A Survey of Social Media Users with Mental Illness

John A. Naslund, PhD^{a,b,c}, Kelly A. Aschbrenner, PhD^{b,d}, Gregory J. McHugo, PhD^d, Jürgen Unützer, MD, MPH, MA^e, Lisa A. Marsch, PhD^{c,d}, and Stephen J. Bartels, MD, MS^{a,b,f}

^aThe Dartmouth Institute for Health Policy and Clinical Practice, Dartmouth College, Lebanon, NH, United States

bHealth Promotion Research Center at Dartmouth, Lebanon, NH, United States

^cThe Center for Technology and Behavioral Health, Dartmouth College, Lebanon, NH, United States

^dDepartment of Psychiatry, Geisel School of Medicine at Dartmouth, Lebanon, NH, United States

^eDepartment of Psychiatry and Behavioral Sciences, University of Washington, Seattle, WA, United States

^fDepartment of Community and Family Medicine, Geisel School of Medicine at Dartmouth, Lebanon, NH, United States

Abstract

Aim—Social media holds promise for expanding the reach of mental health services, especially for young people who frequently use these popular platforms. We surveyed social media users who self-identified as having a mental illness to learn about their use of social media for mental health and to identify opportunities to augment existing mental health services.

Methods—We asked 240 Twitter users who self-identified in their profile as having a mental illness to participate in an online survey. The survey was in English and inquired about participants' mental health condition, use of social media for mental health, and interest in accessing mental health programs delivered through social media.

Results—Respondents from 10 countries completed 135 surveys. Most respondents were from the United States (54%), Canada (22%), and the United Kingdom (17%) and reported a psychiatric diagnosis of either: schizophrenia spectrum disorder (27%), bipolar disorder (25%), major depressive disorder (16%), or depression (20%). Young adults age 35 (46%) were more likely to use Instagram (p=0.002), Snapchat (p<0.001), and their mobile phone for accessing social media (p<0.001) compared to adults age 36 and older (53%). Most participants (85%) expressed interest in mental health programs delivered through social media, especially to promote overall health and wellbeing (72%) and for coping with mental health symptoms (90%).

Disclosures

Corresponding Author: John A. Naslund, MPH, 46 Centerra Parkway, Lebanon, NH, United States, 03766. john.a.naslund@gmail.com.

Conclusions—This exploratory study demonstrates the feasibility of reaching social media users with mental illness and can inform efforts to leverage social media to make evidence-based mental health services more widely available to those in need.

Keywords

mental illness; social media; digital technology; intervention; Twitter

Introduction

Mental illness is a leading cause of disability worldwide (Vigo et al., 2016). Estimates of 12-month prevalence for serious mental illnesses such as schizophrenia, bipolar disorder, or major depressive disorder are roughly 4–6% (Ferrari et al., 2013; Kessler et al., 2009), while common mental disorders such as depression or anxiety are about 30% (Steel et al., 2014). Nearly three quarters of all mental illnesses begin in early adulthood (Kessler et al., 2005) and can have devastating consequences across the lifespan, including increased risk of poverty, homelessness, suicide, and early mortality (Draine et al., 2002).

A sizeable treatment gap also exists, which refers to the large number of individuals living with mental illness who do not receive adequate treatment. In most countries, it is estimated that the majority of individuals in need of mental health services do not receive any treatment (Kazdin, 2017). For example, a recent study from the United States found that fewer than 30% of individuals who screened positive for depression received any treatment (Olfson et al., 2016). For some individuals, accessing care can be challenging due to experiences of stigma, discrimination, or social isolation (Thornicroft, 2008), though there are additional barriers such as geographic distance, poverty, long wait-times, and out-ofpocket expenses associated with seeking treatment (Hert et al., 2011). Furthermore, many available treatments for mental health conditions do not meet evidence-based standards (Mechanic, 2014), and reports have highlighted that care for people with mental illness is often highly variable and of poor quality (Druss, 2006). Numerous concerns have been raised regarding the reach, effectiveness, and sustainability of traditional approaches to mental health care that rely heavily on one-to-one, in-person encounters with professionals (Kazdin, 2017). Novel delivery models are needed to make mental health care more widely available to those who need it.

With over 2 billion social media users worldwide (Kemp, 2016), there may be opportunities to use popular social media to improve the treatment, care, and services available to people living with mental illness. For example, a recent study highlighted the near universal use of popular social media (over 97%) among young people with serious mental illness, and that daily use exceeded 2.5 hours on average with Facebook as the most popular platform, followed by Instagram and Twitter (Birnbaum et al., 2015). A survey of individuals with mental illness receiving community mental health services found this sample had comparable rates of Facebook and Twitter use as the general population (Naslund et al., 2016a). Several recent studies have also indicated that many people with mental illness are turning to social media to share their personal experiences of living with a mental illness, to seek mental health information and advice, to learn from others, or to provide support to

other individuals facing similar challenging mental health problems (Lal et al., 2016; Naslund et al., 2016b; Naslund et al., 2014).

Given that social media has become an increasingly important feature in the daily lives of individuals with mental illness, efforts are necessary to explore whether these individuals would be interested and willing to access mental health services delivered through these popular platforms. There is mounting evidence supporting the acceptability and effectiveness of Internet-delivered interventions for the treatment and management of various mental disorders, including interventions using social components such as online support groups, discussion forums or chat rooms, which are often referred to as a form of social media (Naslund et al., 2015). However, less is known about whether popular social media such as Facebook, Instagram, Twitter, or others could be viable options for augmenting existing mental health care services.

In this exploratory study, our objective was to learn about the characteristics of individuals who self-identify as having a mental illness on popular social media, and to develop a better understanding of how they use social media for their mental health and whether they would be interested in accessing evidence-based programs for their mental health through these platforms. We considered reaching out to this group of individuals who openly disclose their mental illness on popular social media as an important starting point for identifying potential opportunities for social media to support the delivery of mental health services. We also examined whether there were differences in patterns of social media use and interest in receiving mental health services delivered through social media between young adults age 35 and adults age 36 and older.

Methods

Participant Recruitment and Procedures

Participants in this study were recruited through Twitter, a popular social media platform where users can post up to 140-character messages called "tweets". There are over 319 million active Twitter users (Statista, 2017), of which about 79% are outside the United States (Twitter, 2016). In the United States, about 21% of the population and 36% of young adults under age 30 use Twitter (Greenwood et al., 2016). We selected Twitter for this study because most users and the content they share can be accessed publicly. This was necessary because we identified potential participants to complete our online survey by searching Twitter for users who explicitly self-identified as having a mental illness within their profile, or in a tweet or caption. We searched Twitter for user accounts using the following terms: "schizophrenia"; "schizoaffective"; "schizotypal"; "psychosis"; "bipolar disorder"; "major depression"; and "depression". We focused our search primarily on serious mental illnesses such as schizophrenia spectrum disorders, bipolar disorder, or major depressive disorder, in order to recruit participants who are more likely to experience debilitating symptoms and societal stigma due to their illness and thus, may stand to benefit the most from online interventions. We specifically differentiated between "depression" and "major depression" because major depressive disorder is considered a serious mental illness and is associated with greater symptom severity and functional impairment (Kessler et al., 2003).

From May 7, 2016 to December 18, 2016, we contacted individuals online who selfidentified as having a mental illness on Twitter. Only individuals with publicly accessible Twitter accounts could be identified and contacted. The lead researcher (JN) contacted these individuals directly using a standardized 140-character personalized tweet as follows: "Hi, I'm a student working on a project about social media & mental health would you be willing to answer a short survey?" Participants who responded to the tweet and expressed interest in the project were then sent a follow-up tweet containing the link to complete the online survey questionnaire through Qualtrics. Because only individuals with publicly accessible accounts were contacted, the survey link was visible to anyone using Twitter. Therefore, other Twitter users who viewed the tweet could have clicked the link and accessed the online survey; however, the instructions made it clear that the survey was for people with mental illness. Additionally, some respondents asked if they could share the link with their friends or other people who also have a mental illness and who actively use social media. Potential participants could also ask questions on Twitter about the purpose of the survey. Participants were not compensated for completing the surveys. The Committee for the Protection of Human Subjects at Dartmouth College approved all study procedures.

Survey Instrument

Our survey contained 20 questions, was in English, and was created using Qualtrics online survey software. We collected information about respondents' demographic characteristics such as age, gender, ethnicity, living situation, education, employment status, and mental illness diagnosis. Three additional questions were included to learn more about participants' mental illness diagnoses by asking about the amount of time since they received their mental illness diagnosis, whether they have ever been hospitalized due to their mental illness, and how often mental health symptoms interfere with their daily activities (such as work, school, recreation, or other activities). The survey was kept anonymous and no personally identifying information, such as name, address, date of birth, or personal health information was collected. Participants' exact age was also not asked; instead a categorical variable was used with the youngest age category <20 years and the highest age category >65 years. Participants' location was collected at the country level.

There were also questions about participants' social media use. These included the frequency of use, the different types of social media platforms used, and the reasons for using social media to connect with other people who also have a mental illness. Lastly, participants were asked whether they would be interested in programs to help people with mental illness delivered through social media. If participants responded "Yes", then they were prompted to choose from a pre-populated list to indicate their interest in any or all of the following five programs: programs to promote overall health and wellbeing; programs for coping with mental health symptoms; programs for learning to talk to doctors and using the health care system; exercise and weight loss program; or programs to help stop smoking cigarettes. These programs were selected based on our prior research (Naslund et al., 2016b; Naslund et al., 2014), and also because of what could be readily developed and evaluated in a pilot study using popular social media platforms. We were also interested in assessing the feasibility of collecting online survey data from people who self-identify as having a mental

illness on Twitter by measuring response rates to the initial invitation tweet to participate and the number of completed online surveys.

Data Analysis

The survey responses were tabulated to provide summary statistics, and chi-square tests were used to explore differences in participant's demographic characteristics and social media use between young adults age 35 and adults ages 36 and over. We specifically defined young adults as age 35 and under because this age group (age 18–35) is most vulnerable to the onset of serious mental illness (Kessler et al., 2007). Stata 14.0 was used for all statistical analyses.

Results

Participant characteristics

We sent tweets to 240 individuals who self-identified as having a mental illness on Twitter, inviting them to participate in a survey. A total of 112 (46.7%) individuals responded to the tweet and were then sent the link to complete the online survey. Respondents started 142 surveys during the study period, and completed a total of 135. The discrepancy in our response rate (112 responses on Twitter vs. 142 surveys initiated) occurred because our survey link was openly shared on Twitter, and many respondents shared the link with their friends. We cannot determine how many of the Twitter users who were initially sent the survey link eventually completed the survey because the survey responses were not linked to individuals' Twitter accounts in order to maintain anonymity. In this section, we report findings for the 135 individuals who completed the survey. Over half of the sample was from the United States (n = 73; 54%), followed by Canada (n = 30; 22%), and the United Kingdom (n = 23; 17%). Remaining participants were from Australia (n = 2), Malaysia (n = 2), Denmark (n = 1), the Netherlands (n = 1), the Philippines (n = 1), Singapore (n = 1), and the Caribbean (n = 1).

Participants' demographic and clinical characteristics are listed in Table 1. There were 62 (46%) young adults age 35 and 72 (53%) adults age 36–65; one participant chose not to answer the question about age. About two thirds of the overall sample were female (65%) and most were non-Hispanic white (83%). A larger proportion of the young adults age 35 (n = 15; 24%) were from ethnic minority groups compared to adults age 36–65 (n = 5; 7%; $\chi^2 = 7.88$; p = 0.019). Education levels were high for the overall sample, as most participants had some college (29%) or a college degree (53%). While education levels differed between age groups ($\chi^2 = 16.61$; p = 0.005), this was largely because more young adults age 35 had some college (40% vs. 19%) or were currently in school (5% vs. 0%), and fewer had completed their college degree (37% vs. 67%) when compared to adults age 36–65. Employment status did not differ between age groups, though a quarter of the sample (n = 34; 25%) reported being on disability. The majority of participants reported living alone, with family, or with a partner or spouse, and living situation did not differ between age groups.

Participants' self-reported mental illness diagnoses did not differ between age groups. Over two thirds of the sample reported having a diagnosis of serious mental illness, defined as schizophrenia spectrum disorder (n = 36; 27%), bipolar disorder (n = 34; 25%), or major depressive disorder (n = 21; 16%). Time since diagnosis differed between age groups ($\chi^2 = 25.88$; p<0.001), where most adults age 36–65 (n = 62; 86%) received their diagnosis over 5 years ago compared to fewer than half of the young adults age 35 (n = 28; 45%). Mental illness severity was comparable between age groups. Over half of participants reported being hospitalized at least once due to their mental illness (n = 82; 61%), most reported experiencing moderate to very severe mental health symptoms that interfere with their daily activities (n = 105; 78%), and roughly half (n = 69; 51%) reported having a least one secondary mental health diagnosis.

Social media use

Participants' frequency and type of social media use are listed in Table 2. As expected, nearly the entire sample (n = 126; 93%) reported using social media daily. Young adults age 35 were significantly more likely to use Instagram (63% vs. 36%; $\chi^2 = 9.57$; p = 0.002) and Snapchat (39% vs. 11%; $\chi^2 = 13.96$; p<0.001) compared to adults age 36–65. Almost the entire sample of young adults age 35 reported usually accessing social media through their phone (n = 61; 98%) compared to a smaller proportion of adults age 36–65 (n = 54; 75%; $\chi^2 = 14.97$; p<0.001).

There were no significant differences between age groups with regards to the use of social media for mental health. For example, two thirds of participants (n = 90; 67%) reported using social media to connect with others who also have a mental illness, while over half of participants indicated that they use social media to share their personal experiences about living with mental illness (n = 82; 61%) or to learn about strategies for coping with mental illness (n = 70; 52%).

Interest in programs for mental health on social media

In response to the question "Would you be interested in participating in programs to help people with mental illness delivered through social media?", a total of 85% (n = 115) of participants indicated "Yes". A similar proportion of young adults age 35 (86%; n = 53) and adults age 36–65 (85%; n = 61) expressed interest in accessing programs for mental health through social media. Among the selection of five possible programs, participants indicated that they were most interested in programs to promote overall health and wellbeing (72%; n = 83) and programs for coping with mental health symptoms (90%; n = 103), followed by programs for learning to talk to doctors and using the health care system (60%; n = 69), exercise and weight loss programs (41%; n = 47), and programs to help stop smoking cigarettes (9%; n = 10). As illustrated in Figure 1, interest in these different programs did not differ between age groups.

Discussion

In this study, we demonstrated the feasibility of using a novel targeted survey approach for reaching individuals who self-identify as having a mental illness on Twitter. We found that

young adults age 35 and adults age 36–65 showed many similar demographic and clinical characteristics and patterns of social media use. The majority of participants from both age groups (85%) expressed interest in accessing programs for helping people with mental illness delivered through social media. The findings reported here are exploratory and therefore should be interpreted cautiously. Nonetheless, our study yields valuable insight regarding potential for social media to expand the reach and availability of mental health services to those in need.

Nearly all (98%) of the young adults age 35 reported using their own mobile phone for accessing social media and were more likely to use Instagram and Snapchat compared to adults age 36–65. This is consistent with findings from the general population showing that Instagram and messaging apps that automatically delete sent messages such as Snapchat are far more popular among young people compared to older age groups (Greenwood et al., 2016). Beyond these differences, the frequency of social media use, using social media for mental health purposes, and interest in programs for mental health delivered on social media did not differ between age groups. This suggests that social media programs designed to help people with mental illness could appeal to a wide age demographic, or perhaps that individuals who openly disclose their mental health condition online share many common interests and characteristics. None of the respondents to our survey were over age 65, indicating that older adults may be less likely to openly disclose having a mental illness online, and that social media may not be a suitable platform for reaching this older age group.

Participants expressed interest in accessing programs for general wellness and for coping with mental health symptoms, which may be expected, given that 78% of participants reported that the degree to which mental health symptoms interfered with daily activities was moderate to very severe. Many participants also indicated that they would be interested in programs delivered on social media to help them communicate with their doctors and better navigate the health care system. This suggests that while many participants likely have access to health care, they may find it challenging to obtain the care they need. They may also wish for social media to support the relationship with their care team or to use social media for augmenting formal mental health care. This may be consistent with studies that have documented that much of the mental health and medical care available to people with mental illness is considered inadequate (Kazdin, 2017; Mechanic, 2014). Exercise and weight loss programs were also identified as important among participants, potentially reflecting the high rates of overweight and obesity impacting people with mental illness (Allison et al., 2009). Interestingly, few participants expressed interest in programs for smoking cessation, despite considerable evidence showing that people with mental illness smoke cigarettes at disproportionately higher rates compared to the general population (Jamal et al., 2015). It is possible that our sample may have contained few smokers, that respondents saw only limited value in quitting smoking, or that they did not feel social media could help with smoking cessation efforts. As highlighted in a recent review of the literature, many people with mental illness are interested in quitting smoking, yet for many of these individuals tobacco cessation is not considered a priority when compared to management of mental health symptoms (Trainor and Leavey, 2017).

Our study also sheds light on the importance of social media for accessing peer support among people with mental illness. For example, we found that two thirds of participants reported using social media to connect with others who also have a mental illness, and that over 70% use social media in this way at least once each week. Over half of participants also reported using social media to share personal experiences about living with mental illness and to learn from others. While we did not explore participants' specific motivations for connecting with others with mental illness online, prior studies have reported that accessing illness experiences shared by other patients within online communities may be valuable for supporting illness self-management, especially when there is limited access to knowledgeable and supportive peers in offline contexts (Fergie et al., 2016; Ziebland and Wyke, 2012). Our study provides further evidence consistent with research documenting the increasing use of online communities among people with mental illness for forming relationships with others (Gowen et al., 2012), sharing personal stories and strategies for coping mental illness (Naslund et al., 2014), and for seeking support and information (Lal et al., 2016).

As reflected by the participants in this study, social media could serve as an important platform for extending the reach of or augmenting mental health programs and services available to people with mental illness. While this study represents a preliminary step towards engaging social media users with mental illness, it shows that there may be openness to accessing evidence-based mental health services in ways that extend beyond traditional clinical settings. This has potential for widespread impact given studies showing that people with mental illness use popular social media at comparable rates as people from the general population (Birnbaum et al., 2015; Naslund et al., 2016a). Participants in this study also came from several different countries, highlighting the wide reach of patient communities and networks through social media, and that novel approaches to delivering mental health services could span multiple time zones and regions. This is especially important given recent and promising evidence that digital technologies could improve the quality and extend the reach of mental health services in low-resource settings (Naslund et al., 2017).

Limitations

Several limitations with our study should be noted. First, we recruited a convenience sample that is likely not generalizable to the broader online community of people with mental illness, or to people with mental illness who have not publicly disclosed their mental health condition on social media. While our objective was to specifically reach out to this group of social media users, it is important to recognize that their responses were likely biased because they are active social media users and may therefore be more interested in receiving mental health services through social media. Learning from those who openly share their illness experiences online is an important starting point for informing the next steps towards developing and disseminating programs for mental health using social media. Second, we were unable to link participants' responses to clinical data, and therefore relied on self-report to confirm mental illness diagnoses and could not confirm whether participants were actively receiving mental health care or had access to mental health services. We believe that it is unlikely that participants would have been dishonest about having a mental illness given

the stigma associated with these diagnoses and given that no compensation was provided for participation in this study. Third, our study sample was limited in other ways because there were fewer males, most participants were non-Hispanic white, and education levels were high. Therefore, our findings likely do not generalize to other user groups of individuals with mental illness on social media. A prior study of the general population in the United States showed that a greater proportion of social media users have college degrees compared to high school or less education (Greenwood et al., 2016), which further highlights the need for efforts to reach people with mental illness with less education. It is important to note that the high-education levels observed for the participants in our study suggests that our recruitment methods were less successful for reaching people living with mental illness who may experience poorer functioning or who may be most marginalized. Fourth, the vast majority of participants (n = 119; 88%) in this study reported having a mental health diagnosis for at least 1 year or longer. As the onset of mental illness is often characterized as a time of acute crisis, social disruption, and uncertainty (Perry, 2014), ongoing efforts are needed to determine whether social media platforms could be effectively leveraged to reach individuals facing new mental illness diagnoses or first episode diagnoses. Lastly, we are unable to calculate a precise response rate to our online survey because the survey link was shared through publicly visible tweets, and participants could also share the link with others. After reaching out to 240 individuals, we obtained 135 completed surveys, suggesting a response rate as high as 56%. This is promising when compared to response rates documented in previous studies using targeted online surveys, where response rates have ranged from 20-40% (Kaplowitz et al., 2004; Sheehan, 2001), and even as low as 4.5% (Siegel et al., 2011).

Conclusions

Our exploratory study offers early validation of the interest and opportunities for leveraging popular social media platforms for supporting the mental health and wellbeing of people with mental illness. By demonstrating the success of reaching out to individuals who self-identify as having a mental illness on social media, our study also highlights a potentially novel approach for engaging this at-risk group. This is an emerging research area. Efforts are clearly needed to determine the feasibility and effectiveness of mental health programs delivered through social media, and consideration of the privacy risks, harms, and overall safety is also critical.

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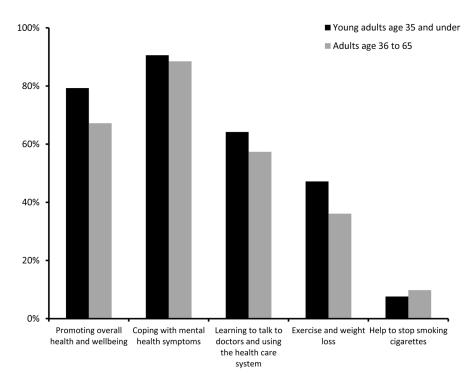


Figure 1.The types of programs that young adults age 35 and adults age 36–65 expressed interest in accessing through social media*

*A total of n = 115 (85% of the total sample) participants, including n = 53 (86%) adults age 35 and n = 61 (85%) adults age 36–65, expressed interest in receiving different types of programs to help people with mental illness delivered through social media. There were no significant differences between age groups for the different types of programs selected.

Table 1 Participants' demographic and clinical characteristics

Characteristic	Number of respondents*	Young Adults 18– 35 years	Adults 36–65 years	P
Demographic characteristics	N = 135	N = 62	N = 72	
Gender				0.847
Male	43 (31.9%)	19 (30.7%)	24 (33.3%)	
Female	88 (65.2%)	40 (64.5%)	47 (65.3%)	
LGBTQ	6 (4.4%)	2 (3.2%)	4 (5.6%)	0.516
Race/ethnicity				0.021
Asian	5 (3.7%)	4 (6.5%)	1 (1.4%)	
Black/African American	8 (5.9%)	7 (11.3%)	1 (1.4%)	
Caucasian/non-Hispanic white	112 (83.0%)	46 (74.2%)	65 (90.3%)	
Hispanic or Latino	4 (3.0%)	1 (1.6%)	3 (4.2%)	
Native	3 (2.2%)	3 (4.8%)	0	
Education				0.005
<high school<="" td=""><td>7 (5.2%)</td><td>5 (8.1%)</td><td>2 (2.8%)</td><td></td></high>	7 (5.2%)	5 (8.1%)	2 (2.8%)	
High school	13 (9.6%)	6 (9.7%)	7 (9.7%)	
Some college	39 (28.9%)	25 (40.3%)	14 (19.4%)	
College degree	72 (53.3%)	23 (37.1%)	48 (66.7%)	
Currently in school	3 (2.2%)	3 (4.8%)	0	
Employment				0.08
Full time employment	48 (35.6%)	21 (33.9%)	27 (37.5%)	
Part time employment	21 (15.6%)	13 (21.0%)	8 (11.1%)	
Student	6 (4.4%)	6 (9.7%)	0	
Not employed	10 (7.4%)	4 (6.5%)	6 (8.3%)	
On disability	34 (25.2%)	12 (19.4%)	22 (30.6%)	
Volunteer, retired, caregiver	14 (10.4%)	5 (8.1%)	8 (11.1%)	
Living situation				0.153
Live alone	31 (23.0%)	11 (17.7%)	20 (27.8%)	
Live with family	48 (35.6%)	28 (45.2%)	20 (27.8%)	
Live with my partner (e.g., spouse, significant other)	46 (34.1%)	17 (27.4%)	28 (38.9%)	
Live with roommates	5 (3.7%)	4 (6.5%)	1 (1.4%)	
Supported housing	2 (1.5%)	1 (1.6%)	1 (1.4%)	
Clinical characteristics				
Primary mental illness diagnosis				0.900
Schizophrenia spectrum disorder	36 (26.7%)	19 (30.7%)	17 (23.6%)	
Bipolar disorder	34 (25.2%)	16 (25.8%)	18 (25.0%)	
Major depressive disorder	21 (15.6%)	7 (11.3%)	14 (19.4%)	
Depression	27 (20.0%)	12 (19.4%)	15 (20.8%)	

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Young Adults 18-Characteristic Number of respondents* Adults 36-65 years P 35 years Post-traumatic stress disorder 9 (6.7%) 4 (6.5%) 4 (5.6%) 3 (2.2%) 1 (1.6%) 2 (2.8%) Anxiety Borderline personality disorder 2 (1.5%) 1 (1.6%) 1 (1.4%) Don't know 3 (2.2%) 2 (3.2%) 1 (1.4%) Time since diagnosis < 0.001 <1 month 2 (1.5%) 2 (3.2%) 0 10 (7.4%) 8 (12.9%) 2 (2.8%) <1 year 3 (4.2%) 1-2 years ago 11 (8.2%) 8 (12.9%) 13 (21.0%) 17 (12.6%) 4 (5.6%) 2-5 years ago >5 years ago 91 (67.4%) 28 (45.2%) 62 (86.1%) 4 (3.0%) 3 (4.8%) 1 (1.4%) Have not received a diagnosis 0.058 Number of mental illness diagnoses 63 (46.7%) 31 (50.0%) 31 (43.1%) 1 diagnosis 2 diagnoses 36 (26.7%) 10 (16.1%) 26 (36.1%) 33 (24.4%) 19 (30.7%) 14 (19.4%) 3 diagnoses 0.258 Number of times hospitalized for mental illness Several times 62 (45.9%) 34 (54.8%) 28 (38.9%) One time 20 (14.8%) 8 (12.9%) 12 (16.7%) 52 (38.5%) 20 (32.3%) 31 (43.1%) Never How often mental health symptoms interfere with daily 0.938 activities (such as work, school, recreation, or other Not at all 3 (2.2%) 2 (3.2%) 1 (1.45) Minimal (can be easily ignored without effort) 8 (5.9%) 3 (4.8%) 5 (6.9%) Mild (can be ignored, but does not affect my daily 18 (13.3%) 8 (12.9%) 10 (13.9%) activities that much) 63 (46.7%) 30 (48.4%) 33 (45.8%) Moderate (cannot be ignored and occasionally affects my daily activities) 13 (21.0%) 14 (19.4%) Severe (cannot be ignored and frequently limits my 28 (20.7%) daily activities) 14 (10.4%) Very severe (cannot be ignored and always affects my 6 (9.7%) 8 (11.1%) daily activities)

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 $^{^{*}}$ There were a total of 135 survey respondents, though one respondent did not provide age.

Table 2
Participants' interest in, and use of, social media for mental health

Social Media Use	Total respondents*	Young Adults 18– 35 years	Adults 36–65 years	P
	N = 135	N = 62	N = 72	
Frequency of social media use				0.615
Daily	126 (93.3%)	59 (95.2%)	66 (91.7%)	
At least once each week	7 (5.2%)	3 (4.8%)	4 (5.6%)	
Less than once each week	2 (1.5%)	0	2 (2.8%)	
Types of social media				
Twitter	114 (84.4%)	55 (88.7%)	58 (80.6%)	0.195
Facebook	121 (89.6%)	55 (88.7%)	65 (90.3%)	0.767
Instagram	65 (48.2%)	39 (62.9%)	26 (36.1%)	0.002
YouTube	84 (62.2%)	37 (59.7%)	47 (65.3%)	0.504
Snapchat	32 (23.7%)	24 (38.7%)	8 (11.1%)	< 0.001
WhatsApp	31 (23.0%)	17 (27.4%)	14 (19.45)	0.275
Pinterest	43 (31.9%)	22 (35.5%)	21 (29.2%)	0.435
Google Plus	22 (16.3%)	8 (12.9%)	14 (19.4%)	0.308
How social media is usually accessed				
Own Phone	115 (85.2%)	61 (98.4%)	54 (75.0%)	< 0.001
Own Computer	89 (65.9%)	38 (61.3%)	50 (69.4%)	0.322
Own Tablet	44 (32.6%)	17 (27.4%)	27 (37.5%)	0.215
Someone else's device	8 (5.9%)	4 (6.5%)	4 (5.6%)	0.827
What are the main reasons you use social media?				
Connect with others who also have mental illness	90 (66.7%)	41 (66.1%)	48 (66.7%)	0.948
Learn about mental illness from others	59 (43.7%)	26 (41.9%)	32 (44.4%)	0.770
Share personal experiences about living with mental illness	82 (60.7%)	42 (67.7%)	39 (54.2%)	0.109
Learn about strategies for coping with mental illness	70 (51.9%)	31 (50.0%)	38 (52.8%)	0.748
How often do you use social media to search for information about your mental illness?				0.374
Daily	34 (25.3%)	15 (24.2%)	19 (26.4%)	
At least once each week	44 (32.6%)	23 (37.1%)	20 (27.8%)	
At least once each month	25 (18.5%)	13 (21.0%)	12 (16.7%)	
Less than once each month	32 (23.7%)	11 (17.7%)	21 (29.2%)	
How often do you use social media to connect with other people who also have a mental illness?				0.456
Daily	59 (43.7%)	28 (45.2%)	30 (41.7%)	
At least once each week	37 (27.4%)	15 (24.2%)	22 (30.6%)	
At least once each month	11 (8.2%)	6 (9.7%)	5 (6.9%)	
Less than once each month	23 (17.0%)	9 (14.5%)	14 (19.4%)	

^{*} There were a total of 135 survey respondents, though one respondent did not provide age.