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A Student-Centered Mental Health Virtual Community Needs and Features: A Focus Group Study

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Abstract. Mental health is a pervasive challenge in the population and especially for university/college students on campuses across North America. Anxiety, stress and depression are on the rise and a scalable, economically sound innovation is essential to address these mental health challenges. The research team has conducted 8 focus groups in April to May 2016 in order to elicit perspectives of students at York University about their online activities and the development of an online mindfulness based Mental Health Virtual Community. This paper explains the main results of the qualitative analysis pertaining to the challenges and benefits of an online mindfulness based Mental Health Virtual Community.

Keywords. mental health, virtual communities, health, health informatics, qualitative design, students, campuses, universities, colleges,

1. Introduction

The prevalence of diagnosable mental illness is increasing at a high rate on university campuses across North America. In 2013, a student survey of 32 Canadian post-secondary institutions found high anxiety in 56.5%; hopelessness in 54%; seriously depressed mood in 37.5%; and overwhelming anger in 42% [1]. An assessment of 997 students on York campus indicated that 57% scored in ranges that suggested depression levels sufficient for diagnosable clinical depression, while 33% scored in ranges (on the Beck-Anxiety Inventory) equivalent to individuals diagnosed with panic disorder and generalized anxiety disorder [2]. Loss of generic productivity and reductions in health-related quality of life also lead to indirect but major economic burden [3]. Canadian estimates, based on 2003 data, show that mental illnesses cost \$51 billion dollars yearly, with 9.8% of direct medical cost, 16.6% of long term work loss, 18.2% of short term work loss, and 55.4% (28 billion dollars) due to loss of health utilities (e.g. vision, hearing, speech, mobility, dexterity, emotion, cognition and pain as assessed in the Health Utilities Index Mark 3 system) [4].

Mindfulness-based interventions have been found to positively impact psychological health [5,6], with multiple meta-analyses demonstrating positive impacts in clinical and non-clinical populations [7-11].

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Virtual communities (VCs), or online communities, are groups of people collaborating to achieve a goal using online tools [12]. Health VCs have received increased attention in the health research community in attempts to educate and support patients while enabling and empowering them to become active participants in managing their own health conditions [13, 14]. The VCs create an opportunity to scale mindfulness interventions to a wide range of students while preserving participants' anonymity and connecting them to others.

In an academic-industry partnership, our team is developing a mindfulness virtual community to engage students at York University, and ultimately across Canada. The overall aim is to enhance students' mental well-being by imparting skills to identify and address mental health challenges in a timely and cost effective way. A randomized control trial is set to start in January 2017. In preparation for the development of the Mindfulness Virtual Community, we have conducted eight focus groups. The primary objectives were to elicit perspectives of students on their online activities when feeling stressed or down and the development of an online mindfulness based Mental Health Virtual Community. We present here results of the qualitative analysis pertaining to the challenges and benefits of an online mindfulness based Mental Health Virtual Community (MVC).

2. Study Design

Undergraduate students were recruited for the focus groups from the Keele campus of York University in March and April of 2016. The study inclusion criteria were (1) being an undergraduate student enrolled at York University and (2) being of age 18 and above. There were no exclusion criteria. The study flyers were distributed across campus and interested students were encouraged to contact the research assistant for further details.

Overall, 72 students participated in the focus groups. Before the start of each focus group, participants were asked to review and sign a written consent form. A trained research team member (CM) moderated the focus group discussions using a semi-structured interview guide. The discussions lasted on average 90 minutes and were audio recorded. The participants completed a brief survey at the end of the session.

All qualitative data was transcribed verbatim. Transcripts were imported into ATLAS.ti for Windows (version 7.5.12; ATLAS.ti GmbH, Germany). The preliminary coding was completed by the moderator and refined through re-review by all team members. The survey data was entered into SPSS 23.0 (IBM Corporation, USA) and descriptive statistics prepared to describe the sample characteristics

3. Results

Participants demographic characteristics were as follows: the mean age was 23.38 (SD 5.82) years, ranging from 18 to 47 years; 55.6% (n = 40) of the participants identified as females. When asked which university year they have completed or were in, 12.5% (n = 9) answered first year, 16.7% (n=12) second year, 25% (18) third year, 26.4% (19) fourth year, 9.7% (n=7) fifth year and 9.5%(n=7) answered "other". 9.7% (n = 7) were working more than 20 hours per week, 30.6% (n=22) were working 10 to 20 hours,

18.1% (n=13) worked less than 10 hours per week, while 41.7% (n = 30) did not have any job. 37% (n=27) of the students were enrolled in more than 4 courses that semester, 54.2% (n=39) were enrolled in 3 to 4 courses, while 8.3% (n=6) were enrolled in only 1 to 2 courses. The focus group qualitative data analyses uncovered many themes, two of which are directly related to the design of the MVC: (1) the need for a mental health specific virtual community, and (2) the content and features of the MVC.

3.1 The Need for a MVC

Many students felt disconnected owing to living off-campus. They described that sometime the network of friends is not enough to face mental health challenges. Some perceived that the campus mental health resources were either limited and not known to students. They perceived value in having a virtual community for mental health (6 groups out of 8) and emphasized its anonymity (7 groups out of 8) as holding potential to overcome stigma and keep privacy which was a great concern. Students gave comments on the advantages of having an MVC.

"It seems like an online community would like – it takes away a lot of the excuses. Oh, I don't want to go out today. Oh, I don't have to. Oh, it doesn't fit into my schedule. Well, hey, I can kind of go online, whenever I want. Or oh, there's stigma attached to going to a support group. Okay. There's no stigma because nobody knows I'm kind of going on there..." (Female, 31, Canadianborn)

3.2 Content and Features

Some of the main aspects discussed by the participant students related to the customization (6 groups out of 8). In relation to MVC the flexibility of the platform design and the ability to personalize the content to students' preferences and likes were considered important. Students expressed their aversion to content that feels judgmental or patronizing (4 groups out of 8) or like homework (2 groups out of 8). For example, one student stated

"Well, one of my roommates and I, like we both are trying to get into meditation, but we have very different styles. Like, for me, I prefer like a guided meditation that talks about sensation, so like focusing on letting go of the stress in each of your extremities, stuff like that, whereas she prefers more like, a visualization, like imagine yourself on a beach, kind of thing... So like, having a mix of -- like, I'm sure there are other trends... so having, again, those options." (Female, 21, Canadian-born)

"What I would like not to see is actually tips and patronizing ways of oh, you should do this or that to avoid stress because I already have enough of that in real life, people saying you should do this" (Male, 22, non-Canadian born)

"I kind of don't want it to be like a chore, like. I want to go through it and feel at ease. I don't want to be having to read like five, 10 pages of words. And especially grammar is too complicated, I don't want to be taking out a

dictionary and looking that up. I want it to be very easy, simple." (Female, 18, Canadian-born)

Noting the potential for bullying (6 groups out of 8) in the online world, students have stressed the importance of having a moderator to maintain "safety" and appropriateness in the community (e.g. discussion boards).

"I just know in discussion boards and stuff, like there's people who will say mean, negative things behind anonymity, people will be trolling the boards and I feel like it's always hurtful, but especially in a group where people are coming, expecting to have full support... the moderator is a good idea and maybe like screening posts before they go up, like someone has to approve it before it can be visible on the site or the app." (Male, 24, Canadian-born)

4. Discussion

While the qualitative analysis is not yet complete, we could already see a main drive to get mental health resources online for a student population that is scattered geographically and mainly commuting to campus. The other important advantage of an MVC is overcoming stigma and social pressure. In addition, a virtual community holds potential to use scarce resources effectively as it may reduce the need for costly one-to-one mental health consultations. However, students perceived that the content should be flexible and personalized and that a culture of safety should be installed and overseen by a moderator. This finding is in line with research that shows that trust is important for patients in online health communities [15, 16].

5. Conclusion

In order to create a student-centered virtual community to address mental health challenges among post-secondary students, we have conducted eight focus groups to uncover their online behavior and their requirements for a mental health focused virtual community. Our preliminary analysis provided insight into the students' experience and needs; it showed the need for an online mental health solution that fill the gaps in the current healthcare system in relation to mental health; especially that it provides anonymity that helps overcome stigma associated with mental health. Students have expressed their (1) need for personalization and customization of the content and the way the student deal with the content; (2) their aversion to patronizing content, and (3) the importance of an online moderator. Further analysis is expected to uncover deeper layers of online behavior and students' preferences. The success of a virtual community platform depends on how much a platform is user-centered.

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References

- [1] American College Health Association, American College Health Association-National College Health Assessment II: Candian Reference Group Executive Summary Spring 2013, in, American College Health Association, Hanover, MD, 2013.
- [2] M. Pirbaglou, R. Cribbie, J. Irvine, N. Radhu, K. Vora, and P. Ritvo, Perfectionism, Anxiety, and Depressive Distress: Evidence for the Mediating Role of Negative Automatic Thoughts and Anxiety Sensitivity, *J Amer College Health* 61 (2013), 477-483.
- [3] T. Ungar, The health care payment game is rigged, in: National Post, National Post, Toronto, 2015.
- [4] K.L. Lim, P. Jacobs, A. Ohinmaa, D. Schopflocher, and C.S. Dewa, A new population-based measure of the economic burden of mental illness in Canada, *Chronic Dis Can* **28** (2008), 92-98.
- [5] K.W. Brown and R.M. Ryan, The benefits of being present: mindfulness and its role in psychological well-being, J Pers Soc Psychol 84 (2003), 822-848.
- [6] S.L. Keng, M.J. Smoski, and C.J. Robins, Effects of mindfulness on psychological health: a review of empirical studies, *Clin Psychol Rev* 31 (2011), 1041-1056.
- [7] A. Chiesa and A. Serretti, Mindfulness-based stress reduction for stress management in healthy people: a review and meta-analysis, *J Altern Complement Med* 15 (2009), 593-600.
- [8] S.G. Hofmann, A.T. Sawyer, A.A. Witt, and D. Oh, The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review, J Consult Clin Psychol 78 (2010), 169-183.
- [9] J. Vollestad, M.B. Nielsen, and G.H. Nielsen, Mindfulness- and acceptance-based interventions for anxiety disorders: a systematic review and meta-analysis, Br J Clin Psychol 51 (2012), 239-260.
- [10] J. Eberth and P. Sedlmeier, The Effects of Mindfulness Meditation: A Meta-Analysis, Mindfulness 3 (2012), 174-189.
- [11] P. Sedlmeier, J. Eberth, M. Schwarz, D. Zimmermann, F. Haarig, S. Jaeger, and S. Kunze, The psychological effects of meditation: A meta-analysis, *Psych Bulletin* 138 (2012), 1139-1171.
- [12] J.L. Bender, M.C. Jimenez-Marroquin, L.E. Ferris, J. Katz, and A.R. Jadad, Online communities for breast cancer survivors: a review and analysis of their characteristics and levels of use, *Support Care Cancer* 21 (2013), 1253-1263.
- [13] C. El Morr, Mobile Virtual Communities in Healthcare: Managed Self Care on the move, in: International Association of Science and Technology for Development (IASTED) - Telehealth (2007), Montreal, Canada, 2007.
- [14] C. El Morr, J. Kawash, C.E. Morr, J. Kawash, C. El Morr, and J. Kawash, Mobile Virtual Communities Research: A Synthesis of Current Trends and a Look at Future Perspectives, *International Journal for Web Based Communities* 3 (2007), 386-403.
- [15] J. Hou and M. Shim, The role of provider-patient communication and trust in online sources in Internet use for health-related activities, *J Health Commun* **15** Suppl **3** (2010), 186-199.
- [16] C.R. Lyles, U. Sarkar, J.D. Ralston, N. Adler, D. Schillinger, H.H. Moffet, E.S. Huang, and A.J. Karter, Patient-provider communication and trust in relation to use of an online patient portal among diabetes patients: The Diabetes and Aging Study, J Am Med Inform Assoc 20 (2013), 1128-1131.