

---

## Intervention Preferences Among Post-Secondary Students: What Can Be Done to Increase the Uptake of Alternatives to One-on-One Therapy? Préférences d'intervention au sein des étudiant·e·s postsecondaires : qu'est-ce qui peut être fait pour accroître le choix des alternatives à la thérapie un à un?

---

Emma R. Giberson

*University of New Brunswick*

Janine V. Olthuis

*University of New Brunswick*

Taylor MacKinley

*University of New Brunswick*

Jennifer McWilliams

*University of New Brunswick*

Luke Umar-Khitab

*University of New Brunswick*

### ABSTRACT

Post-secondary students are at high risk for mental health problems, and many universities are not meeting students' mental health needs. Cost-effective solutions such as group therapy, online therapy, and peer mentor counselling are available but often underutilized. Therefore, the study's aim was to assess students' willingness to engage in different types of mental health services and how willingness can be increased via modifications. Participants ( $N = 327$ , 65.4% female) were university students (age 17–51 years) who completed a 30-minute online self-report questionnaire on their willingness to participate in and perspectives on different interventions. Results showed participants' mean willingness to engage was low for all interventions but the lowest for group therapy. Content analysis showed that students want to feel comfortable in interventions, are concerned about their confidentiality, and are minimally aware of what is involved in interventions. Findings will be integral to university practitioners and policy-makers looking to improve uptake of offered mental health services.

### RÉSUMÉ

Les étudiant·e·s postsecondaires sont à haut risque de problèmes de santé mentale et de nombreuses universitaires ne répondent pas aux besoins en santé mentale des

étudiant-e-s. Des solutions rentables telles que les thérapies de groupe, la thérapie en ligne, ou le counseling du mentorat par les pairs sont disponibles, mais souvent sous-utilisées. L'objectif de l'étude était donc d'évaluer la volonté des étudiant-e-s à s'engager auprès de différents types de services en santé mentale et comment cette volonté peut être accrue grâce à des modifications. Les participant-e-s ( $N = 327$ , 65,4 % étant des femmes) étaient des étudiant-e-s universitaires (âgé-e-s entre 17 et 51 ans) qui ont rempli un questionnaire d'autodéclaration en ligne de 30 minutes sur leur volonté de participer à différentes interventions et leurs perspectives quant à celles-ci. Les résultats ont montré que l'intention de s'engager des participant-e-s était basse pour toutes les interventions, la plus basse étant pour la thérapie de groupe. L'analyse du contenu a montré que les étudiant-e-s souhaitent se sentir confortables durant les interventions, qu'ils sont inquiet-ète-s à propos de la confidentialité et qu'ils ne sont pas vraiment au courant de ce que les interventions impliquent. Les conclusions seront intégrales pour les praticien-ne-s universitaires et les décideur-se-s politiques qui souhaitent améliorer l'adoption des services en santé mentale offerts.

Emerging adulthood (i.e., ages 18–29 years; Arnett, 2000) is a developmental period rife with rapid changes in intellectual and social growth, which can be challenging for individuals to manage (Blanco et al., 2008). In addition, many emerging adults attend university, where they are exposed to significant new stressors (Acharya et al., 2018). Research (Archarya et al., 2018; Linden & Ecclestone, 2024) suggests that post-secondary students experience stressors across numerous domains including the learning environment (e.g., meeting expectations of professors), campus culture (e.g., the pressure to succeed), interpersonal relationships (e.g., making new friends, balancing a social life with academics), and personal life (e.g., living independently, managing finances). Experiencing frequent and repeated stressors is correlated with reports of increased psychological distress among post-secondary students (Linden & Ecclestone, 2024). Indeed, the significant cognitive and psychosocial development that occurs during emerging adulthood and these heightened stressors can serve as risk factors for psychiatric disorders (Auerbach et al., 2016; Chung & Hudziak, 2017). A large-scale, multi-country epidemiological study conducted between 2014 and 2017 found that 31% of the 13,984 full-time post-secondary students surveyed reported having a mood, anxiety, or substance use disorder during the 12 months prior to data collection (Auerbach et al., 2018). It is evident that emerging adults can benefit from support during this period of rapid growth and change.

To help meet the mental health needs of their students and support students in managing the stressors they experience, post-secondary institutions generally provide basic mental health care to students (Read et al., 2023). Nevertheless, despite concerted efforts to provide such care, the services provided by many universities do not meet students' mental health needs (Cornish et al., 2017; Osborn et al., 2022). For example, an American study found that only 16.4% of

students with a mental health problem received minimally adequate treatment (i.e., at least four visits or two visits and medication over 12 months; Auerbach et al., 2016). Many studies have identified a need for better implementation of university mental health services (Cornish et al., 2017; Eisenberg et al., 2011).

While more needs to be done to increase university students' access to mental health services, it is important to recognize that there are many services available to students. Research shows that students tend to be aware of available services (Fletcher et al., 2007) but underutilize them (Eisenberg et al., 2007). For example, Robinson and colleagues (2016) found that out of 400 students at a Canadian university, 74% were aware of available services, but only 8% had accessed these services. Another study found that only 50% of students would consider seeking help from campus mental health services if they had a mental health problem (Cunningham et al., 2017). Canadian research suggests that most counselling staff (84%) report that their institution would benefit from expanding mental health promotion and outreach activities (Jaworska et al., 2016).

Students' willingness to access services may vary according to the type of service offered. Some research shows that students are more willing to use informal support such as from family and friends than on- or off-campus formal support (Samuel & Kamenetsky, 2022). When formal supports are needed, Cohen and colleagues (2021) found that young adults were willing to use non-traditional (e.g., self-help books, mobile apps, online support communities, peer counselors) and traditional (e.g., primary care providers, mental health professionals) mental health services but that traditional services were preferred. Young adults were not willing to replace traditional with non-traditional mental health services but viewed non-traditional mental health services as a supplement to treatment. Further work by Cunningham and colleagues (2017) considered how various factors including intervention options available and the background of service providers influenced students' decisions to pursue mental health services. They identified three groups of students, including students (45.5%) who clearly preferred services offered by psychologists or psychiatrists, students (39.3%) who preferred a choice of interventions but had particular interest in alternative interventions (e.g., diet, exercise), and students (15.2%) who were hesitant about services but were highly influenced by the background of the professional. Taken together, these studies highlight the relevance of the type of intervention being offered insofar as students' willingness to engage is concerned.

It is also important to acknowledge structural and attitudinal factors that might influence the degree to which students use on-campus mental health services. Structural barriers to care can include funding limitations, a lack of institutionalized, coordinated, and sustainable mental health policies, a lack of development and training opportunities for faculty and staff, and a shortage of mental health care providers (Mental Health Commission of Canada, 2009). In addition, campus mental health services do not exist in a vacuum. Instead, a range of in-person

and online mental health services is available to students in their broader community and may be preferred (e.g., students may have been using them for a long time, some venues allow help to be received entirely anonymously). Attitudinal factors that might influence students' use of on-campus services might include stigma, a perception that services are not needed, and discomfort with seeking services (Reichert, 2012; Samuel & Kamenetsky, 2022). Samuel and Kamenetsky (2022) found that while almost a third of students reported they were not in distress and 11% did not feel that counselling would be helpful to them, 28.7% stated they would not feel comfortable accessing services, 18.5% said they did not know how to access services, 14.6% were concerned about the cost, and 11% were worried about what others would think.

Generally, the services preferred by university students (Cohen et al., 2021; Cunningham et al., 2017) are face-to-face, one-on-one services provided by a qualified mental health practitioner. These services are also some of the most resource intensive. To combat the shortage in mental health care providers and the costliness of one-on-one therapy, researchers have highlighted the importance of the development and uptake of mental health services other than one-on-one therapy (Kazdin & Rabbitt, 2013). Group therapy (GT), online therapy (OT), and peer mentor counselling (PMC) are potentially more cost-effective intervention options that have been shown to have a positive impact on student mental health. For instance, research shows that GT can be as effective as individual therapy in reducing anxiety and depression symptoms in the long term among university students (Fawcett et al., 2020; Mörtberg et al., 2011). Systematic review findings show that OT results in small to moderate reductions in mental health symptoms relative to no intervention among university students (Harrer et al., 2019). While the literature on PMC for mental health outcomes is less established, this intervention is also associated with reduced anxiety, depression, and stress among university students (Grégoire et al., 2024).

### **Study Aims**

To increase the use of mental health services on university campuses, it is important to examine students' perceptions of and preferences for different types of services. Understanding how students view certain services—particularly cost-effective options such as GT, OT, and PMC—could allow practitioners to demystify and/or adjust these services to increase their uptake. As such, the aim of the current study was to assess and compare students' willingness to engage in different types of mental health services (i.e., GT, PMC, and guided and unguided OT), to understand why students may or may not pursue these types of services, and to assess whether their willingness to engage in these services can be increased via modifications.

## Methods

### Participants and Procedure

Participants consisted of 327 university students at a medium-sized university (of approximately 10,000 students) in Atlantic Canada. They were recruited through the Department of Psychology's Human Research Participant Pool using the SONA system (i.e., a participant recruitment system used to award extra credits for research participation to students in psychology courses) and via online advertisements on university platforms. Advertisements provided participants with a link to a virtual consent form and a 30-minute self-report questionnaire hosted on Qualtrics. Credits toward courses in introductory psychology were awarded for participation where appropriate. Study procedures were reviewed and approved by the institutional research ethics board (REB #2020-105).

### Measures

#### *Demographics*

Participants reported on their age, their gender, their ethnicity, their marital status, and their mental health intervention history.

#### *Willingness to Participate in Intervention Options*

Participants were provided with definitions of one-on-one-therapy, GT, PMC, and OT to ensure uniform understanding of the types of interventions. One-on-one therapy was defined as "meeting with a mental health professional individually face-to-face or virtually." GT was defined as "a type of talk therapy that involves meeting with a group of people with similar mental health concerns and a group leader to discuss problems and sometimes to learn strategies and skills to reduce symptoms." A peer mentor counsellor was defined as "an undergraduate or graduate student who listens, provides social and emotional support, and may teach mental health skills in a one-on-one setting." OT was defined as "a mental health treatment program on a computer or smartphone with or without the guidance/support of a mental health professional." Participants were provided with further clarification to distinguish between guided (i.e., with the support or guidance of a mental health professional) and unguided (i.e., self-help) OT.

Participants rated their willingness to participate in GT, PMC, and guided and unguided OT (i.e., "If you needed help with a mental health problem, how willing would you be to participate in [type of intervention]?") on a visual analogue scale ranging from 0 (*not at all willing*) to 100 (*incredibly willing*). A second series of visual analogue scales (on the same metric) was used to assess participants' willingness to participate in each of the intervention options if their preferred option had a wait time of 3 to 6 months (i.e., "If you needed help with a mental health problem but you were told that you would have to wait 3–6 months to receive your preferred treatment options (for example, one-on-one therapy), how

willing would you be to participate in [type of intervention] if you could receive it immediately?”). Participants were then presented with a third series of visual analogue scales (using the same metric) and rated how willing they would be to participate in a particular intervention with suggested alterations (e.g., “Group therapy if I could bring a friend”). These scales were presented to participants only after they had completed the open-ended questions listed below.

### ***Perspectives on Intervention Options***

Participants completed a series of open-ended questions to assess their perspectives on GT, PMC, and OT. Questions included the following: “If you needed help with a mental health problem, can you think of any reasons why you might want to participate in [type of intervention]?” and “If you needed help with a mental health problem, can you think of any reasons why you would NOT want to participate in [type of intervention]?” Participants then indicated what could be done to improve the attractiveness of the intervention (“Is there anything that could be done to make [type of intervention] a more attractive or desirable treatment option for university students?”).

### **Data Analysis**

Descriptive statistics were used to analyze participants’ self-reported willingness to engage in each of GT, PMC, and OT (guided and unguided). To compare students’ willingness to engage in the different types of intervention, a within-groups ANOVA was used. Paired samples *t*-tests were used to compare students’ willingness to engage in an intervention (e.g., GT) with their willingness to engage in said intervention with a researcher-proposed modification (e.g., GT if the participant could bring a friend). Bonferroni corrections were used to address the number of analyses. Open-ended questions were reviewed independently by two research assistants (RAs) and coded using Hsieh and Shannon’s (2005) directed content analysis approach. The RAs first reviewed question responses independently, paying attention to significant, recurring concepts (i.e., endorsed by at least 1% of participants) that aligned with prior research findings and theory. The RAs then met to compare concepts and to integrate them into initial codes. After they created the codes, the RAs scrutinized the open-ended questions rigorously and independently and coded them according to the initial codes they had generated. They ensured that all aspects of the participants’ responses were captured by the codes. New codes were generated as needed. The RAs then met to compare their coding of the open-ended questions to ensure consistency and that any new codes were mutually agreed upon. Inter-rater reliability between the two coders at this stage was 95.8%. Differences in coding were resolved by a third coder, the principal investigator. Responses were then grouped into key categories that reflected the main codes. Parsimony was emphasized.

## Results

### Sample Characteristics

In total, 353 students completed the survey. Of these, 26 participants completed less than 50% of survey so were removed, leaving 327 participants. Participants (65.4% female) were aged 17 to 51 ( $M = 20.8$ ;  $SD = 4.64$ ) and predominately Caucasian ( $n = 249$ ), with the remaining identifying as Asian or Asian Canadian ( $n = 33$ ), of mixed ethnicity ( $n = 15$ ), Black or African Canadian ( $n = 8$ ), Indigenous ( $n = 9$ ), Hispanic or Hispanic Canadian ( $n = 1$ ), or of other ethnicity ( $n = 12$ ; e.g., Middle Eastern). Most were single ( $n = 165$ ) or in a relationship of at least 6 months ( $n = 111$ ), with an additional 33 participants in a relationship of 6 months or less, 14 married/common law, and 4 divorced, separated, or widowed. One hundred and twenty-two participants had received treatment for a mental health problem before, 55.7% of whom were currently receiving mental health treatment (including 14.8% receiving on-campus mental health treatment).

### Quantitative Analyses

Participants' mean willingness to engage (on a scale of 0 to 100, where 0 was *not at all willing* and 100 was *incredibly willing*) in the interventions were: 41.30 ( $SD = 26.58$ ) for GT, 51.58 ( $SD = 26.78$ ) for PMC, 58.40 ( $SD = 27.22$ ) for guided OT, and 49.64 ( $SD = 28.88$ ) for unguided OT. *T*-tests showed that participants' mean willingness to engage in each intervention increased significantly (all  $p < .001$ ) if their preferred intervention had a wait time of 3–6 months (GT:  $M = 57.23$ ,  $SD = 27.59$ ,  $t = -13.99$ ; PMC:  $M = 60.52$ ,  $SD = 27.20$ ,  $t = -9.65$ ; guided OT:  $M = 61.69$ ,  $SD = 27.64$ ,  $t = -3.56$ ; unguided OT:  $M = 55.60$ ,  $SD = 29.73$ ,  $t = -6.70$ ). A within-groups ANOVA revealed significant differences in willingness to engage across interventions,  $F(3,978) = 34.22$ ,  $p < .001$ . Post-hoc pairwise comparisons showed that students were significantly more willing to use guided and unguided OT and PMC over GT. Students were also significantly more willing to use guided OT than PMC or unguided OT.

Paired samples *t*-tests (see Table 1) revealed that participants were significantly more willing to engage in GT with all of the researcher-proposed modifications. For example, as compared to their willingness to engage in GT, participants were significantly more willing to engage in GT without forced participation ( $M = 67.60$ ,  $SD = 28.03$ ),  $t(326) = -16.28$ ,  $p < .001$ . Participants also indicated that they would be more willing to engage in PMC with all suggested modifications, except participants were significantly less willing to engage in PMC if it involved a drop-in lounge ( $M = 46.49$ ,  $SD = 28.27$ ),  $t(326) = 3.58$ ,  $p < .001$ . Because guided OT was preferred over unguided OT, suggested modifications to OT were compared to guided OT only. Participants were more willing to engage in guided OT with some, but not all, of the suggested modifications. For instance,

Table 1  
*Paired Sample T-tests Comparing Willingness to Engage in an Intervention Versus That Intervention With Modifications*

Type of intervention	<i>M</i> willingness	<i>SD</i>	<i>t</i>
Willingness to engage in GT	41.31	26.58	
Willingness to engage in GT ...			
... with a friend	47.94	29.43	-4.24*
... with strangers	59.80	29.47	-11.93*
... without forced participation	67.60	28.03	-16.28*
... in a single-gender group	54.62	27.70	-8.28*
... with a same-gender therapist	57.20	28.06	-9.87*
... in small groups (3–4 people)	59.63	27.13	-12.17*
... with same-year peers	48.58	27.95	-4.85*
... with peers with the same problem	67.35	26.85	-17.74*
... with guaranteed confidentiality	76.74	25.87	-23.51*
Willingness to engage in PMC	51.58	26.78	
Willingness to engage in PMC ...			
... if the counsellor was a stranger	61.71	26.28	-7.75*
... with a same-gender counsellor	61.32	25.83	-6.94*
... with advance appointments	65.88	26.15	-11.78*
... with a drop-in lounge	46.49	28.27	3.58*
... with a drop-in private office	67.54	27.23	-12.45*
... via texting	58.43	31.97	-3.66*
... with guaranteed confidentiality	76.38	25.59	-18.77*
... with a well-trained counsellor	78.67	22.75	-20.87*
Willingness to engage in OT (guided)	58.40	27.22	
Willingness to engage in OT (guided) ...			
... with phone calls to a therapist	60.78	27.39	-1.54
... with emails to a therapist	50.47	28.10	5.53*
... with texts to a therapist	55.90	29.28	1.80
... with a same-gender therapist	57.55	27.50	0.58
... with a well-trained therapist	72.78	25.77	-10.61*
... with the same benefits as one-on-one therapy	71.69	26.38	-9.82*

Note. *N* = 326; GT = group therapy; PMC = peer mentor counselling; OT = online therapy; \**p* < 001.

as compared to their willingness to engage in OT, participants were more willing to participate in OT if they knew it offered the same benefits as one-on-one therapy ( $M = 71.69$ ,  $SD = 26.38$ ),  $t(326) = -9.82$ ,  $p < .001$ . In contrast, participants were significantly less willing to engage in guided OT if it involved exchanging emails with the therapist ( $M = 50.47$ ,  $SD = 28.10$ ),  $t(236) = 5.53$ ,  $p < .001$ .

### Qualitative Content Analysis

Participants' responses to questions about why they would and would not participate in each of GT, PMC, and OT if they had a mental health problem, as well as their suggestions to improve each of these therapies, are summarized in Tables 2–4. With respect to GT, participants resoundingly noted that being able to connect with other group members who were going through shared experiences was an attractive feature of GT. In contrast, just over a third of participants described a reluctance to share personal information, which made GT seem scary and unappealing. In line with these comments, participants suggested that increasing the familiarity of group members and improving the confidentiality of GT would make it a more attractive option for post-secondary students. When asked about PMC, participants reported that being able to work with a peer mentor who shared their experiences and could relate to them made PMC an appealing therapy option. Student concerns with PMC centred on a lack of confidence that the training received by peer mentors was sufficient to address their problems. However, ensuring quality training was suggested by only a minority of participants as a way to improve PMC. Instead, students suggested that providing a choice in peer mentor and increasing the confidentiality of the service would help students feel more comfortable using PMC. Finally, ease of accessibility was widely endorsed as a reason to pursue OT, though participants noted that a sense that OT was quite impersonal might present a barrier to its use. Participants suggested that guided OT would increase its attractiveness to students. Across all three modalities, participants noted that better advertising about available therapy options and their characteristics would also increase uptake.

### Discussion

The results of the current study showed that university students are only moderately willing to participate in GT, OT, or PMC. Participants, however, were significantly more willing to participate in any of these if they had to wait 3–6 months for their preferred option. Qualitative data revealed which characteristics of each intervention type discourage student use and offered suggestions to improve participation. Together, findings support the continued use of these interventions on campus, incorporating students' suggestions to modify the approaches to increase interest in participation. Results should be useful to practitioners and policy-makers as they work to improve student mental health care.

Table 2  
*Students' Perspectives on Group Therapy (GT)*

Code	Description	Response example	Frequency
<b>Reasons for participating in GT</b>			
Shared experiences	GT helps students see they are not alone and connects them with others going through similar experiences. This normalizes and validates their experience.	"To feel not alone and be with other people who may be going through the same thing."	76%
Learning opportunity	GT provides the opportunity to learn things from others (e.g., coping strategies) that can be applied to one's life.	"I would most likely gather intel on how other individuals cope with their mental health problem(s) so that I could try to apply it to my own life."	14%
Accessibility	GT can be received quickly.	"It might be quicker to receive than some types of treatment."	4%
Recommendation	GT is recommended by a professional or a close friend.	"... was recommended by therapist for treatment plan."	2%
<b>Reasons for not participating in GT</b>			
Reluctance to share	Students would feel uncomfortable and vulnerable expressing their feelings to strangers in a group.	"It might be scary to talk about your experiences and emotions with people that you don't know that well."	36%
Confidentiality concerns	GT poses concerns with protecting one's privacy.	"I feel like these people could expose my thoughts to others outside of the group therapy session."	25%
Fear of judgment	GT invokes fears of judgment or embarrassment.	"Felt worried that I would be judged by others in the group."	21%
Secondary exposure risk	Group settings create a risk of being exposed to other problems, potentially resulting in being triggered or invalidated.	"I might compare myself to the other people there and invalidate my own issues if they are not as severe as other people's."	7%

Code	Description	Response example	Frequency
Lack of efficacy	GT is not seen as a beneficial treatment method.	“People do group therapy to get pity, in my opinion. I don’t need pity, I need help, and group therapy seems almost like a placebo effect of getting better.”	4%
Inaccessibility	GT is difficult to access due to inflexible scheduling.	“I can choose when I make my appointment times in other therapies, but interventions with others usually have a pre-determined time, which I may not be able to make.”	1%
<b>Suggestions to improve GT</b>			
Increase familiarity	Increase participants’ feelings of comfort with the group by making the other members more familiar (e.g., get to know other members before therapy, include non-therapy activities).	“Yes, we should try to engage everyone in it [and] let them talk to each other, play a few games. Maybe have a small movie theatre where they can watch movies together once in a while or watch some sports.”	25%
Advertise better	Spread the word about what GT entails via better branding and marketing.	“More advertisement on how group therapy works.”	24%
Improve confidentiality	Guarantee confidentiality by having confidentiality agreements or anonymity.	“Having some sort of confidentiality agreement between group members and assuring they are there for the right reasons.”	21%
Run small groups	Reduce the size of groups.	“I say make groups as small as possible. Maybe 4 to 5, but not more than 7, for sure. People are more comfortable with lesser people around and tend to open up better.”	16%
Increase commonality	Have groups with commonality among group members (e.g., in age, gender, lifestyle, mental health).	“Small groups with people with similar issues or similar interests that can relate to one another.”	15%
Increase flexibility in scheduling	Make GT more accessible via flexible scheduling.	“I think flexibility is the main attractive quality as it’s hard to balance school, assignments, and work on a constant basis for regular weekly meetings.”	7%

Table 3  
*Students' Perspectives on Peer Mentor Counselling (PMC)*

Code	Description	Response example	Frequency
<b>Reasons for participating in PMC</b>			
Shared characteristics	Peer mentors can relate to students because of commonalities in age and experience and, therefore, can provide good advice.	"It would be nice talking to someone around the same age as me as well as someone who understands what university struggles are like."	55%
No-pressure peer support	Peer mentors act in a similar role to professionals, without the stress that comes with speaking to a professional. The relationship is more equal.	"Allows for a more 'friend-like' support system."	16%
One on one	PMC involves a one-on-one interaction.	"You would get a lot more one-on-one time with someone who might have a better understanding of your situation, as a fellow student."	12%
Accessibility	PMC is more accessible in a timely manner.	"I would consider participating if it meant I could get treatment significantly faster than my preferred option."	8%
Staff members are trained	Peer mentors are properly trained to deal with mental health.	"I think since they have 6 weeks of training, they would be likely to keep the information to themselves and provide good advice."	4%
<b>Reasons for not participating in PMC</b>			
Insufficient training	Peer mentors do not obtain enough training and therefore may not be effective.	"Seems risky and would not be entirely sure if 6-week course is enough for qualifications."	31%
Lack of confidentiality	Peer mentor may be previously known or encountered in the future, creating confidentiality issues.	"I wouldn't want someone I could possibly see out and about and I wouldn't feel like it's very confidential as people will know they're a peer mentor."	23%

Code	Description	Response example	Frequency
Reluctance to share	Sharing feelings with a stranger, a peer, or a fellow student is challenging.	"I am a reserved, private person and don't think I would be comfortable sharing such personal things with a peer."	17%
Incompatibility	Fear of not being compatible or able to relate to the peer mentor.	"Possibility of having no connection to the person and it being awkward and sharing thoughts with someone I do not relate to."	10%
Fear of judgment	Fear or anxiety that the peer mentor may be judgmental.	"I don't like being looked down on by my peers."	7%
<b>Suggestions to improve PMC</b>			
Advertise better	Spread the word about what PMC entails, what training is included, and how it works via better branding and marketing.	"I did not know this was even an option, so again, advertisement and assurance that it is confidential and judgment free."	22%
Provide choice in peer mentor	Give the ability to choose a peer mentor from a range of options.	"Make it easier for students to feel more comfortable by giving preferences on the type of person they might want to speak to. For example, some people may want to speak to someone with the same religion or gender as them to make it easier."	22%
Guarantee confidentiality	Ensure confidentiality by making the peer mentor someone unknown, signing a confidentiality clause, or meeting anonymously.	"Make the peer mentor program a blurred face over a Skype call to hide identity so truths can be spoken without the fear of it hanging over one's head."	20%
Ensure quality training	Ensure peer mentors are receiving proper training.	"Perhaps a more comprehensive training than 6 weeks."	11%
Gradually progress relationship	Have the relationship between peer mentor and student begin gradually and move into therapeutic topics after comfort is established.	"Maybe if we could know the peer mentors and interact casually for bonding before we actually get into the counselling session, it might prove to be helpful for us to open up better."	7%

Code	Description	Response example	Frequency
Create a positive environment	Offer PMC in a positive, relaxing, and non-stigmatizing environment.	"The surrounding could be a factor. If the environment is relaxing and encouraging people to communicate, and to ease themselves, then I think that most people will be eager to go the next time."	5%
Limit face-to-face interaction	Limit the need for face-to-face interaction by communicating via email or text.	"Peer mentor counselling may be seen as a more desirable option if it did not exclusively stick to face-to-face interaction. The ability to text or email a peer mentor is good for people like me that experience social anxiety."	4%
Focus on listening for psychosocial problems	Rather than counselling, have peer mentors focus on listening and relationship building (e.g., emotional support, maybe problem solving), to help with less "clinical" problems.	"I don't necessarily want counselling from a peer. Rather have someone to listen than giving me (potentially wrong) advice."	3%
Offer in a group Format	Offer PMC in a group format.	"Maybe incorporating peer mentor counselling into 'group therapy' and have it as more of a relaxed, positive, supportive environment to connect with others."	3%
Have qualified people available	Offer students the option to have a mental health professional attend the session too.	"I would suggest that there is an experienced counsellor (like a graduate student or a professor) who is also there to listen so basically there are three people in a talk."	2%

Table 4  
*Students' Perspectives on Online Therapy (OT)*

Code	Description	Response example	Frequency
<b>Reasons for participating in OT</b>			
Accessibility	OT is accessible due to its flexible schedule, ability to be done from home, and immediate access.	"It allows flexibility with schedules (can participate whenever is convenient)."	48%
Impersonal	OT is more impersonal than in-person intervention, making the students feel more comfortable.	"An online intervention might be less scary than going to talk to a group of people or even one individual."	19%
Confidentiality	The confidentiality aspect of OT is appealing.	"There's a level of confidentiality and comfort when confronting mental health problems through a screen."	14%
To learn	OT promotes learning helpful information about one's mental health problem and how to cope.	"It could help me understand about my mental health problem."	4%
Fits less severe problems	OT can help with less serious mental health problems.	"If it was something simple, like developing healthier eating habits, then I would consider online services."	1%
<b>Reasons for not participating in OT</b>			
Impersonal	Since it is performed independently, OT leads to a lack of connection, feelings of loneliness, etc.	"Impersonal; does not feel genuine in any capacity."	36%
Lack of efficacy	OT is ineffective (or less effective than one-on-one therapy), especially for serious mental health issues.	"It might not be effective or best tailored to my personal needs, and oftentimes, isn't drastic enough to change ongoing problems."	13%
Lack of confidentiality	Confidentiality of OT is troubling (e.g., questionable security of the websites, lack of a safe environment in which to go online).	"Internet can be not secure at times, and you would have no clue who would be seeing what you speak about."	12%
Lack of accountability	OT lacks accountability, making it more difficult to follow through.	"No accountability; may not follow it regularly as I would a planned appointment with someone in this profession for years."	12%

Code	Description	Response example	Frequency
Technology concerns	Technology issues (e.g., lack of Internet, dislike of technology, burnout from using technology) make access difficult.	"It depends on how long this would be as Zoom fatigue is all too real a phenomenon. I have SO many online meetings and classes that are severely burning me out."	10%
Prefer in-person	A preference for in-person treatment was stated, but no further reason was provided.	"I'd rather in person."	7%
Lack of guidance	Unguided OT can leave one feeling confused or unsure how to proceed.	"It may not be all that helpful since it is all subjective. You could take what the program is saying completely wrong."	6%
Insufficient training	The training received by those providing OT is unclear or inadequate.	"Person could not be well trained."	3%
Impedes self-expression	OT does not allow for adequate expression of participants' feelings.	"I feel I can express what I'm feeling better by talking in person."	1%
<b>Suggestions to improve OT</b>			
Advertise better	OT must be advertised and marketed better and more positively in terms of how it works and its credibility.	"Advertise online interventions and make them readily available."	26%
Provide guided treatment	OT should include a guided treatment plan that is easy to follow, with clear goals.	"Pair it with human interaction. Once a week or once a month check-in, where the activities are discussed and their effects talked about. And a game plan [is] created for the next tasks."	21%
Improve confidentiality	OT needs ensured confidentiality so that participants can feel safe disclosing personal information.	"Make sure it is safe for everyone and that it cannot be hacked or anything like that."	16%
Increase interactivity	Make OT more fun, personal, easy to use, and interactive, and include activities that increase engagement.	"Also, make them fun. If I am going to sit on the computer for longer than I have to, then that would be something that is important for me."	10%

Code	Description	Response example	Frequency
Increase accessibility	A desire for OT to be easily accessible was stated, but no further explanation was offered.	"Make it more accessible."	10%
Provide video/audio options	OT should include various options for video and audio so that the individual can select their preference.	"Video chat and texting options available."	8%
Provide 24-hour support	OT should be available on demand, 24/7.	"Being able to do it any time when mental health could be struggling."	8%
Provide for free	OT should be free.	"Make more of these services free."	3%

### ***Group Therapy***

Of the four intervention options, participants were least willing to participate in GT. The unique concerns raised by students about GT may be more significant intervention deterrents as compared to those raised about PMC or OT. Accordingly, to increase uptake of GT, substantial modifications may need to be made. Overwhelmingly, students saw the main advantage of GT to be the peer support it offers. Participants said sharing their experiences in a judgment-free environment of similar people would help them feel understood and less alone and might allow them to learn from others. The challenge, however, is that many participants were hesitant to be vulnerable and to share their feelings in a group setting. They feared embarrassment or judgment and had significant concerns about how the information they shared would be kept confidential. University counselling centres are going to have difficulty increasing engagement in GT unless these concerns are addressed. Demystifying GT through better advertising and psychoeducation about what it involves, what the experience is like, and how confidentiality is managed may help address these concerns. This was also suggested by participants. It may be helpful, for example, to generate video clips that show snippets of GT, to include perspectives from those who have engaged in GT, or to introduce the leaders of the group. Prior research shows that students' perceptions on the palatability of GT improve over the course of treatment (Fawcett et al., 2020), suggesting that once students experience the benefits of the peer support component and learn that their fears about GT are unlikely, their willingness to engage may increase.

Participants' responses also provided suggestions on how to facilitate comfort and how to strengthen the relationship between group members (e.g., include non-therapeutic activities, run small groups, run groups with participants experiencing common problems). Implementation of some of these suggestions could make GT more palatable. These findings should encourage practitioners to think outside of the box in terms of how they might run GT. For example, board game nights could serve as social support and/or a precursor to relationship building before the start of therapeutic strategies. Pre- to post-intervention assessments of the outcomes of such approaches would be a useful avenue for future research.

### ***Peer Mentor Counselling***

Evidently, what many participants found most attractive about PMC is the comfort offered through engagement with a peer who understands and can relate to their experiences. This allows the peer to provide unique support different from that of a professional (as participants described it, less stressful and more equal). We see again here, however, the juxtaposition between hypothesizing about the benefits that might come with peer support and an underlying fear that the peer mentor would judge them, be a poor fit, or violate confidentiality. It was obvious from rating scales and open-ended responses that anything that decreased

confidentiality (e.g., a drop-in lounge) would decrease participants' willingness to engage. As was the case with GT, PMC could benefit from improved public awareness of who it is intended for, how it works, and how confidentiality is maintained. A process that allows students to select from among peer mentors and that maximizes the privacy of meetings would promote comfort and minimize confidentiality concerns.

Students also commented on the training, or lack thereof, of peer mentor counsellors. They seemed uncertain that peer mentors were trained in a way that would allow them to provide suitable aid and emphasized the importance of improved training. In addition to better education about the training of peer mentors, universities may need to improve communication about what type of problem PMC is intended to support. Perhaps tools built into university web pages would allow students to complete screening questions to determine if their problem is suitable for a peer mentor or if more intensive services are recommended. The challenge with this type of tool may be that there is limited research on the mental health and well-being benefits that can stem from PMC. While some studies exist (e.g., Grégoire et al., 2024), further research in this area is needed.

### ***Online Intervention***

In general, results suggest a preference for guided OT over unguided OT. This is true in rating scales and open-ended responses. For instance, students indicated that a lack of accountability could be a problem with OT; this problem would likely be minimized if therapy was guided by a mental health professional. The value of OT was predominately seen to be its accessibility, namely that students could participate whenever was convenient from the comfort of home. The downside of OT was generally that it was seen to be impersonal. This aspect of OT seems like another place where there would be room for improved awareness of how therapy works. Students might find that they can build a personal relationship in the context of guided OT. Indeed, research suggests that online interventions can still generate positive therapeutic alliance (Berger, 2017).

Suggestions for improvements to OT could be useful in helping practitioners understand what type of OT appeals to students most. This is important, as most universities provide students access to external OT rather than providing in-house options. Students are interested in online platforms that are confidential and easy to use (i.e., have minimal technological hiccups). They also prefer platforms that are interactive and engaging and that provide various options for audio and video contact with the therapist.

### **Limitations and Conclusions**

There are several takeaways from these findings. First, students place a high importance on feeling comfortable in a setting in which they will be disclosing personal information. Introducing aspects into intervention that threaten this

sense of comfort (e.g., unknown peers, untrained professionals, risk of judgment) negatively impacts their willingness to engage. Second, and relatedly, students are very concerned about privacy and confidentiality. When the characteristics of an intervention convey a risk that their personal information might be shared, they are less interested in that intervention. It seems likely that concerns about stigma are at least partly at play here, given that stigma has been identified as an important barrier to help-seeking among university students (Reichert, 2012). Keeping these two factors in mind may help practitioners gain a better understanding of students' reluctance to engage in certain interventions and adjust intervention options as a way to attend to these concerns. Third, students are generally unaware of what is involved in various interventions (e.g., what group therapy is like, how confidentiality is maintained in group therapy, how peer support workers are trained). This lack of awareness is reflected in their recommendations for improved advertising about intervention options and the way their responses revealed misperceptions about the interventions. This finding suggests an incredibly important role for improved education about mental health intervention options—not just what they are, but what they entail—delivered via student-friendly modalities (e.g., short video clips) on university campuses.

Findings from the current study must be considered in the context of several limitations. First, our definition of OT on the study survey did not attend adequately to the variety of ways that OT can be delivered (e.g., whether or not video calls are used, whether or not treatment modules are standardized). While the lack of specificity in the definition was intentional to capture the range of possibility, its breadth ultimately led to a large diversity in participants' responses that were challenging to code parsimoniously. Similarly, when we asked participants about their intervention preferences, we did not provide exhaustive information about the intervention options. For instance, we did not specify the theoretical orientation of interventions or whether some of the interventions (e.g., group therapy) were offered online or in person. Future studies might consider how these intervention characteristics may affect students' intervention preferences. Second, we did not assess participants' willingness to engage in one-on-one therapy. We chose not to because one-on-one therapy is the dominant delivery method for therapy (Kazdin & Rabbitt, 2013) but is also resource intensive, and we were interested in what we could do to increase engagement with more cost-effective services. Nevertheless, this omission prevented us from comparing students' willingness to engage in GT, OT, and PMC to one-on-one, in-person therapy. Third, participants' year of study was not collected, which doing so could have been helpful in contextualizing study results. For example, 3rd-year students may be more aware of the mental health services available on-campus than 1st-year students. Finally, we did not assess the participants' current mental health. This limits our ability to understand how a current need for care might affect students' willingness to engage in and preferences for various therapy types.

Future research should consider how mental health status may impact students' preferences. Despite these limitations, the current study adds to the literature on university students' mental health intervention preferences. Even though students' willingness to participate in GT, PMC, and OT was only moderate, this study highlighted qualities across interventions that students found attractive and revealed important modifications that can be made to increase the attractiveness and uptake of these intervention options.

## References

- Acharya, L., Jin, L., & Collins, W. (2018). College life is stressful today—emerging stressors and depressive symptoms in college students. *Journal of American College Health, 66*(7), 655–664. <https://doi.org/10.1080/07448481.2018.1451869>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., Hwang, I., Kessler, R. C., Liu, H., Mortier, P., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Aguilar-Gaxiola, S., Al-Hamzawi, A., Andrade, L. H., Benjet, C., Caldas-de-Almeida, J. M., Demyttenaere, K., ... Bruffaerts, R. (2016). Mental disorders among college students in the World Health Organization World Mental Health Surveys. *Psychological Medicine, 46*(14), 2955–2970. <https://doi.org/10.1017/s0033291716001665>
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., Kessler, R. C., & WHO WMH-ICS Collaborators. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology, 127*(7), 623–638. <https://doi.org/10.1037/abn0000362>
- Berger, T. (2017). The therapeutic alliance in Internet interventions: A narrative review and suggestions for future research. *Psychotherapy Research, 27*(5), 511–524. <https://doi.org/10.1080/10503307.2015.1119908>
- Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S.-M., & Olfson, M. (2008). Mental health of college students and their non-college-attending peers. *Archives of General Psychiatry, 65*(12), 1429–1437. <https://doi.org/10.1001/archpsyc.65.12.1429>
- Chung, W. W., & Hudziak, J. J. (2017). The transitional age brain: “The best of times and the worst of times.” *Child and Adolescent Psychiatric Clinics of North America, 26*(2), 157–175. <https://doi.org/10.1016/j.chc.2016.12.017>
- Cohen, K. A., Stiles-Shields, C., Winqvist, N., & Lattie, E. G. (2021). Traditional and nontraditional mental healthcare services: Usage and preferences among adolescents and younger adults. *The Journal of Behavioral Health Services and Research, 48*(4), 537–553. <https://doi.org/10.1007/s11414-020-09746-w>
- Cornish, P. A., Berry, G., Benton, S., Barros-Gomes, P., Johnson, D., Ginsburg, R., Whelan, B., Fawcett, E., & Romano, V. (2017). Meeting the mental health needs of today's college student: Reinventing services through Stepped Care 2.0. *Psychological Services, 14*(4), 428–442. <https://doi.org/10.1037/ser0000158>
- Cunningham, C. E., Zipursky, R. B., Christensen, B. K., Bieling, P. J., Madsen, V., Rimas, H., Mielko, S., Wilson, F., Furimsky, I., Jeffs, L., & Munn, C. (2017). Modeling the mental

- health service utilization decisions of university undergraduates: A discrete choice conjoint experiment. *Journal of American College Health*, 65(6), 389–399. <https://doi.org/10.1080/07448481.2017.1322090>
- Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and access to mental health care in a university student population. *Medical Care*, 45(7), 594–601. <https://doi.org/10.1097/mlr.0b013e31803bb4c1>
- Eisenberg, D., Hunt, J., Speer, N., & Zivin, K. (2011). Mental health service utilization among college students in the United States. *Journal of Nervous and Mental Disease*, 199(5), 301–308. <https://doi.org/10.1097/nmd.0b013e3182175123>
- Fawcett, E., Neary, M., Ginsburg, R., & Cornish, P. (2020). Comparing the effectiveness of individual and group therapy for students with symptoms of anxiety and depression: A randomized pilot study. *Journal of American College Health*, 68(4), 430–437. <https://doi.org/10.1080/07448481.2019.1577862>
- Fletcher, P. C., Bryden, P. J., Schneider, M. A., Dawson, K. A., & Vandermeer, A. (2007). Health issues and service utilization of university students: Experiences, practices and perceptions of students, staff and faculty. *College Student Journal*, 41(2), 482–493.
- Grégoire, S., Beaulieu, F., Lachance, L., Bouffard, T., Vezeau, C., & Perreault, M. (2024). An online peer support program to improve mental health among university students: A randomized controlled trial. *Journal of American College Health*, 72(7), 2001–2013. <https://doi.org/10.1080/07448481.2022.2099224>
- Harrer, M., Adam, S. H., Baumeister, H., Cuijpers, P., Karyotaki, E., Auerbach, R. P., Kessler, R. C., Bruffaerts, R., Berking, M., & Ebert, D. D. (2019). Internet interventions for mental health in university students: A systematic review and meta-analysis. *International Journal of Methods in Psychiatric Research*, 28(2), Article e1759. <https://doi.org/10.1002/mpr.1759>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Jaworska, N., De Somma, E., Fonseka, B., Heck, E., & MacQueen, G. M. (2016). Mental health services for students at postsecondary institutions: A national survey. *Canadian Journal of Psychiatry*, 61(12), 766–775. <https://doi.org/10.1177/0706743716640752>
- Kazdin, A. E., & Rabbitt, S. M. (2013). Novel models for delivering mental health services and reducing the burdens of mental illness. *Clinical Psychological Science*, 1(2), 170–191. <https://doi.org/10.1177/2167702612463566>
- Linden, B., & Ecclestone, A. (2024). Preliminary evidence for the validity of the Brief Post-Secondary Student Stressors Index (Brief-PSSI): A cross-sectional psychometric assessment. *PLoS One*, 19(1), Article e0297171. <https://doi.org/10.1371/journal.pone.0297171>
- Mental Health Commission of Canada. (2009). *Toward recovery and well-being: A framework for a mental health strategy for Canada*. [https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/FNIM\\_Toward\\_Recovery\\_and\\_Well\\_Being\\_ENG\\_0\\_1.pdf](https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/FNIM_Toward_Recovery_and_Well_Being_ENG_0_1.pdf)
- Mörtberg, E., Clark, D. M., & Bejerot, S. (2011). Intensive group cognitive therapy and individual cognitive therapy for social phobia: Sustained improvement at 5-year follow-up. *Journal of Anxiety Disorders*, 25(8), 994–1000. <https://doi.org/10.1016/j.janxdis.2011.06.007>
- Osborn, T. G., Li, S., Saunders, R., & Fonagy, P. (2022). University students' use of mental health services: A systematic review and meta-analysis. *International Journal of Mental Health Systems*, 16(1), Article 57. <https://doi.org/10.1186/s13033-022-00569-0>
- Read, A., Lutgens, D., & Malla, A. (2023). A descriptive overview of mental health services offered in post-secondary educational institutions across Canada. *Canadian Journal of Psychiatry*, 68(2), 101–108. <https://doi.org/10.1177/07067437221128168>

- Reichert, E. (2012). Reducing stigma barriers to help-seeking behaviors among college students. *Psychology, 3*(10), 892–898. <https://doi.org/10.4236/psych.2012.310134>
- Robinson, A. M., Jubenville, T. M., Renny, K., & Cairns, S. L. (2016). Academic and mental health needs of students on a Canadian campus. *Canadian Journal of Counselling and Psychotherapy / Revue canadienne de counseling et de psychothérapie, 50*(2), 108–123. <https://cjc-ccc.ucalgary.ca/article/view/61100>
- Samuel, R., & Kamenetsky, S. B. (2022). Help-seeking preferences and factors associated with attitudes toward seeking mental health services among first-year undergraduates. *Canadian Journal of Higher Education, 52*(1), 30–50. <https://doi.org/10.47678/cjhe.v52i1.189245>

### About the Authors

Emma R. Giberson is a Ph.D. student in clinical psychology in the Department of Psychology at the University of New Brunswick. Her research interests include strategies for increasing access to mental health services, such as Internet-based interventions. ORCID: <https://orcid.org/0009-0009-6318-5800>

Janine V. Olthuis is an associate professor in the Department of Psychology at the University of New Brunswick. Her research interests include increasing access to mental health interventions through (1) e-mental health interventions, (2) transdiagnostic interventions (i.e., interventions focused on treating shared risk factors, most notably anxiety sensitivity), and (3) the use of physical exercise in mental health treatment. She is also a licensed clinical psychologist in New Brunswick.

Taylor MacKinley is a registered social worker currently working with at-risk youth in New Brunswick. Her professional interests include youth mental health, substance use, and trauma-informed care.

Jennifer McWilliams is a Ph.D. student in experimental psychology in the Department of Psychology at the University of New Brunswick. Her research focuses on Canadian allied health care professionals' exercise recommendations for anxiety treatment, exercise and mental health/well-being, the psychosocial impact of social and cultural practices on marginalized populations, and the effects of stereotyping, prejudice, and discrimination on racial/ethnic minorities. ORCID: <https://orcid.org/0000-0003-1436-8642>

Luke Umar-Khitab is a Ph.D. student in the philosophy program at Boston University. His research interests include Hegel, critical theory, and the philosophy of literature.

Correspondence concerning this article should be addressed to Emma R. Giberson, Department of Psychology, University of New Brunswick, 38 Dineen Drive, Fredericton, New Brunswick, Canada, E3B 5A3. Email: [egiberso@unb.ca](mailto:egiberso@unb.ca)