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Improving Mental Health on College Campuses: Perspectives of Indian College Students

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#### Abstract

The mental health of college students is increasingly viewed as an important public health priority. However, there has been little attention paid specifically to college students' perspectives on factors that contribute to mental health challenges or on potential initiatives that could address them. Even less research has focused on students in low-and middle-income countries. In an effort to better understand how to improve mental health and wellness on college campuses, we administered an open-ended survey to 141 Indian college students ( $M_{age}=19.47$ , 65% female). We asked the students to identify: a) issues that contribute to mental health problems among college students, b) potential initiatives or strategies that could be used to improve mental health and wellness, and c) topics that students would like to learn about in a course about mental health and wellness. Applying thematic analysis, we identified academic stressors (e.g., pressure to succeed, competitiveness) and social stressors (e.g., lack of community, party culture and substance abuse) that students reported as contributors to mental health problems. Students also described mental health promotion strategies that could be implemented by faculty members (e.g., providing academic accommodations for students with mental health concerns), the student body (e.g., establishing peer counseling groups), and individual students (e.g., checking-in with others). Finally, they identified topics that they would like to learn about in mental health and wellness courses (e.g., how to identify mental health concerns, how to support friends). By raising several potential targets for mental health and wellness interventions for Indian college students, our study illustrates how open-ended surveys can be a useful and feasible way to solicit input from stakeholders in low- and middle-income countries. Future research will be needed to assess the effectiveness and feasibility of mental health promotion strategies, including those proposed by students.

*Keywords:* Global mental health, college students, open-ended assessment, mental health promotion, India

#### Introduction

Common mental health problems are leading contributors to the global burden of disease (Ferrari et al., 2013). Access to treatment is limited, especially in low- and middle-income countries (LMICs) where there are often few trained providers, high costs associated with treatment, and stigma toward mental health problems (Andrade et al., 2014; Patel et al., 2007; Sartorius, 2007). Furthermore, many mental disorders develop for the first time in adolescence and early adulthood (Patel et al., 2007). Interventions that are implemented in schools and universities have the potential to reach a large share of the population, making them especially promising from a public health standpoint (e.g., Shinde et al., 2018; Wasil, Taylor, et al., 2021). A recent systematic review identified over 60 evidence-based prevention programs for reducing depression, anxiety, and stress among college students (Rith-Najarian et al., 2019). Although many different kinds of evidence-based intervention exist, little is known about which interventions are most appropriate in specific contexts.

Methods from implementation science may be useful in improving our understanding of the kinds of interventions that are most suitable for specific contexts. Leading frameworks in implementation science emphasize that exploration can be an important step prior to adopting, implementing, or sustaining an intervention (Aarons et al., 2011). In the exploration phase, researchers are encouraged to understand the issues, needs, and preferences of stakeholders (Aarons et al., 2011). Such an approach could help us better understand the kinds of evidence-based interventions that are most suitable for implementation on college campuses. Thus far, however, this form of exploration has been rare in college mental health promotion research. Research on college student mental health has generally involved a research team forming hypotheses about factors that influence college student mental health, designing a survey or

experiment to test those hypotheses, and including closed-ended measures (e.g., scales with multiple choice questions or Likert items) for study participants (see Hunt & Eisenberg, 2010). Although this approach is highly valuable, it has certain limitations. For instance, closed-ended questionnaires can miss certain concerns that are salient to participants. By definition, closedended questionnaires require participants to select a response from a set of options determined by study investigators or scale developers. This approach is especially useful when investigators are interested in applying statistical techniques to test hypotheses or make quantitative comparisons. However, when the objective of a study is to explore the views, needs, or behaviors of a population, open-ended questionnaires may usefully supplement information acquired from closed-ended questionnaires (Wasil, Franzen, et al., 2021; Wasil, Venturo-Conerly, et al., 2021). This is especially relevant in LMICs, as many standard questionnaires were designed for use with western samples. To overcome these concerns, it would be useful to conduct needs assessments with college students in LMICs that enable them to articulate, in their own words, the problems they find most salient and the solutions they perceive to be most useful. In addition to filling important gaps in the existing literature, such work can generate hypotheses about interventions and initiatives to promote mental health and wellness in LMICs.

One way to address this gap would involve applying *crowdsourcing techniques* to college students in LMICs. When applying crowdsourcing techniques, investigators ask participants to identify potential ideas to address challenges or problems in a particular context (Stewart et al., 2019). Such techniques help investigators generate ideas for the kinds of strategies and solutions that could be appropriate for solving issues within a given context. Crowdsourcing places participants in the role of experts, allowing those with direct experience in a system to share ideas with researchers. Crowdsourcing studies can help researchers identify novel intervention

ideas, understand which interventions stakeholders believe will be helpful, and identify specific problems that stakeholders find important. For example, implementation scientists recently applied crowdsourcing techniques to understand strategies to improve the uptake of evidence-based practices in behavioral health systems. Clinicians from 38 organizations submitted over 60 ideas and initiatives to enhance the use of evidence-based practices in their clinics (Stewart et al., 2019). This approach may also be useful in exploring the attitudes and preferences of college students. If the voices and perspective of university students were highlighted, investigators may better understand which kinds of interventions are most suitable for implementation.

Such research is especially important in LMICs, such as India. India enrolls 36.6 million college students (Government of India, 2018), and the prevalence of elevated symptoms depression and anxiety among Indian college students ranges from 38% to 60% (Deb et al., 2016; Sahoo & Khess, 2010). Mental health has become a priority in India in recent years, illustrated by the passage of the National Mental Healthcare Act of 2017 (see Namboodiri et al., 2019). Although there have been several initiatives to promote mental health among Indian high school students (e.g., Shinde et al., 2018), relatively little research has been conducted with Indian college students. As a result, exploratory research that aims to understand their perspectives may be especially valuable for informing college mental health promotion efforts.

In this study, we administered an open-ended crowdsourcing survey to students at a private university in India. We aimed to understand factors that contribute to mental health problems on campus, and to generate potential strategies and solutions that could be implemented to improve mental health and wellness. Because there are many groups that can contribute to university mental health initiatives, we asked participants to identify strategies that could be implemented by a variety of stakeholders (e.g., university administration, undergraduate

students). Here, we present a thematic analysis of participants' responses and examine if any responses were associated with participants' level of depressive symptoms.

#### Method

#### Recruitment

Participants were recruited from a private liberal arts university located in Sonipat, Haryana, India. English is the primary language of instruction, and all study materials were presented in English. The university's Institutional Review Board approved the study and the associated procedures.

Data collection took place in April of 2020. Details about the study were sent out to undergraduate students across all four years of study through official undergraduate student Facebook groups and email lists. The recruitment message included a description of the study and a link to a Qualtrics survey. The survey was released shortly after the university transitioned to online learning amidst the COVID-19 pandemic. As a result, students completed the survey in their homes, rather than on campus. All participants provided written informed consent.

#### **Procedure**

After clicking the Qualtrics link, participants were directed to a screen with information about the study's purpose and a consent form. Next, participants completed the Patient Health Questionnaire-9 (PHQ-9) a well-validated measure of depressive symptoms that has been used in studies of young adults in India (Kroenke & Spitzer, 2002; Ganguly et al., 2013; Wasil, Venturo-Conerly, et al., 2020).

Then, participants answered five open-ended questions designed to identify factors that contribute to mental health problems on campus (Question 1), actions that could be taken to improve mental health (Questions 2-4), and suggestions for a campus mental health intervention

(Question 5). The questions were designed to cover suggestions that could apply to various stakeholders (e.g., university administration, students, intervention developers). The questions were developed by our multicultural research team, which includes college students in India (TM, NN, NT), a professor of psychology in India (AB), and an expert in mental health research with experience applying crowdsourcing techniques (RS). Additionally, we piloted the questions with Indian college students unaffiliated with our research team. All members of the team reviewed and approved the final questions. Each of the questions are listed below:

- 1) What are some aspects of student experiences at [university] that you think could contribute to mental health problems?
- 2) What are some steps that the faculty and administration at [university] can take to improve mental health and wellness on campus?
- 3) What are some steps that the student body at [university] can take to improve mental health and wellness on campus?
- 4) What are some steps you can take to improve mental health and wellness at [university]?
- 5) If [the university] were going to include an optional course in mental health and wellness promotion, what should be included in that course?

After answering these questions, participants proceeded to answer additional questions, including a demographics questionnaire. For completing the survey, participants received an Amazon Gift card worth Rs. 250 (approximately \$3.30 USD). Students from introductory psychology classes received course credit along with the gift card.

# **Analyses**

Participants' responses were coded using thematic analysis (Braun & Clarke, 2006). The third and fourth authors (NN and NT) first reviewed the participants' responses independently in order to identify key themes. Then, the first four authors (AW, TM, NN, and NT) discussed the themes and developed five codebooks (one for each of the five questions). Next, the third and four authors independently coded 20% of responses from each question. Estimates of interrater reliability, using Cohen's kappa coefficient, ranged from k=0.62 to k=1. All disagreements were resolved through discussions among the first four authors. Through this process, these authors also identified connections between some of the answers to Question 1 (factors that contribute to mental health concerns) and Questions 2-4 (ideas that could improve mental health on campus). Specifically, we identified instances in which one of the proposed solutions addressed one of the factors that contribute to mental health problems (see Figure 1).

#### Results

# **Sample Characteristics**

See Table 1 for sample characteristics. The final sample consisted of 141 students between the ages of 18-23 ( $M_{\rm age} = 19.47$ ,  $SD_{\rm age} = 1.21$ , 65% female). On average, participants reported high levels of depressive symptoms on the PHQ-9, though there was substantial variability in scores (Mean = 11.32, SD = 6.00, Range = 0-26).

[Insert Table 1 here].

# Themes from open-ended questions

Students raised a variety of concerns about mental health and wellness on campus (Table 2), offered several potential solutions (Tables 3-5), and proposed ideas for a course in mental health and wellness (Table 6). Figure 1 depicts how some of the proposed solutions relate to the

concerns that students raised, and it also lists the primary stakeholder who would carry out the proposed solution.

Below, we summarize and describe students' responses to each of the five questions.

### **Ouestion 1: What factors contribute to mental health concerns?**

[Insert Table 2 here].

#### Theme 1: Academic Pressure

57% of participants reported that academic stress contributed to mental health concerns on campus. Students commonly mentioned a high amount of coursework (36%), a culture of academic competitiveness (10%), and anxiety relating to grades (9%).

Students reported that their coursework was highly demanding and time-consuming. They described how coursework could lead to mental health difficulties by limiting the amount of time they could invest in other kinds of activities. For example, one student wrote, "Course work… everyone is really busy with their own work so it makes you feel very lonely." Another student explained that the amount of coursework limited students' ability to "invest [time] in extracurricular activities or oneself." One student explained how academic expectations could be especially difficult for students who struggle to maintain motivation:

Academics at [the university] demands a strong work ethic and leaves very little room to slack off. On one hand, this helps develop useful skills but on the other, it leaves those students who have periods of very low motivation feeling like they're overloaded with work if they miss a few classes and it becomes impossible to catch up.

Other students emphasized the university's culture of academic competitiveness, in which students often compete for top spots in their classes, leading to pressure, stress, and anxiety. In the words of one student, "[The university] is very competitive—you're constantly

trying to prove yourself... there's constant stress about internships and academics." Another student wrote that academic competitiveness "is one of the major problems that gives rise to mental health issues." Finally, other students listed "too much importance on grades," "cutthroat competition in academics," and "obsession with high grades" as factors contributing to mental health problems on campus.

# Theme 2: Lack of community

26% of students believe that there is a lack of community and belongingness at the university. In the words of one student, "the community is too splintered." Students perceived a division in the student body on the basis of social and political identity. According to one student, one of the contributors to a lack of sense of belonging and mental health issues on campus is a "wide hatred towards individuals with a different political inclination or different beliefs" and this leads to "dominant political opinions being shoved down everyone's throats." People "leave out people" in the process of forming groups and "treat each other poorly." Students also mentioned that "the lack of community at [the university]" leads to feelings of "stress and exclusion."

# Theme 3: Party culture and substance abuse

11% of students reported that the culture of partying, and substance use that often accompanies it, can lead to compromised wellbeing. Students perceived that the alcohol consumption and substance use were common on campus, especially at on-campus parties. Students reported pressure to consume alcohol or use substances, even when they did not want to. For example, one student wrote, "The culture around substance abuse could make some people peer pressured into doing things that they don't want to do." Another student mentioned, "slight pressure of indulging in alcohol or substances with peers." Several students also stated

that there was a "prevalence of substance abuse all around you" and that the party culture can feel "alienating for some people".

# Theme 4: Geographically isolated campus

11% of students believe that the fact that [the university] is located far away from the nearest city, Delhi, leads to compromised wellbeing. As described by one student, "The isolation of (the University) from the rest of Delhi may not allow for people to spend time unwinding, that other colleges are able to provide." Additionally, one student reported that "[the university] was also distant from other colleges," which could add to the sense of isolation. One student commented they feel like they are "in a closed bubble" and that this could have a negative impact on their mental health.

# Question 2: What can university officials do to improve mental health and wellness on campus?

[Insert Table 3 here].

# Theme 1: Academic flexibility and accommodations

24% of students reported that they often find it challenging to keep up with their coursework, especially given the university's emphasis on academic excellence. Students mentioned feeling inadequate about their academic capabilities, which negatively impacts their mental well-being. To reduce the stress associated with academics, students mentioned that greater flexibility with assignment deadlines (14%) and academic accommodations for mental health concerns (11%) could be helpful. For example, one student reported:

Also would definitely appreciate it if making accommodations or asking for extensions

for papers or exams becomes easier. It's not easy at all coming up and asking faculty or anyone to make accommodations. I feel useless and bothersome when I do that, as though I am not good enough as the others who are doing fine amidst all this.

Another student mentioned that academic accommodations for various mental health concerns could not only improve student well-being but also improve the academic performance of students. They mentioned that students may perform better on assignments if they are not "impeded by other factors like mental health issues."

# Theme 2: More counsellors

29% of students reported that the university could hire more counselors and therapists who work in the college counselling center. For example, one student wrote, "Get more therapists and not only counselors. The ratio of counselors to students is abysmal, and we should get more therapists." Two other students also believed that "increasing the number of wellbeing counsellors" and getting "more counsellors and therapists" would aid in alleviating the mental health problems faced by students in the university.

# Theme 3: More slots for in-person therapy

Relatedly, 23% of students believe that having more in-person therapy slots would improve campus well-being. Students reported concerns about the low number of counselors at the college counseling center. Students believed that the low availability of slots for in-person therapy led to limited access to support. For example, one student wrote, "[University counseling center] should increase the number of slots and also the number of counsellors as I feel like they are not able to match the current demand for mental health resources required for the student body at the university". In addition, one student mentioned that "more slots for counselling with

professionals" would make mental health services at the university more accessible to the student body.

# Theme 4: Be more understanding and accommodating of students' mental health needs

19% of students reported that the university faculty and administration could show more empathy towards students facing mental health concerns and be more open to making accommodations to support students who are facing difficulties related to their mental health.

Some students reported that they felt dismissed or minimized when experiencing mental health issues, which exacerbated their problems. For example, one student reported:

[University] administration, especially the faculty and [Office of Academic Affairs], should be empathetic towards students' mental health. It's funny how some....professors were using terms like 'it will be okay' or 'you cannot stop working/ submitting assignments just because you have mental health issues' or say things like 'everyone deals with them.' This... stops [students] from approaching professors ever again.

#### Another student mentioned:

A lot of faculty are already quite empathetic to mental health issues. However, this isn't the case across the board, and a few professors can be quite insensitive and inconsiderate when dealing with such [concerns].

Students generally believe that faculty should "really make an effort to listen to students' concerns". Some students also believed that mental health sensitization workshops may help the faculty understand mental health issues that are faced by students and develop skills necessary to support these students. In the words of one student:

There is currently no guarantee that a faculty will have prior understanding of mental health concerns and take it seriously. An awareness program/workshop surrounding mental health might help.

# Theme 5: Mental health workshops/activities

7% of students reported that the university should host mental health workshops and facilitate activities relating to mental health. Students wrote that sessions/workshops in which they can learn more information about mental health, and skills that they can use to support themselves and others, could be helpful. For example, one student mentions that "all people need some workshops to understand the basics of mental health." Another student stated that such workshops could "teach the student body about what to do if someone we know feels suicidal or depressed." Furthermore, mental health activities and workshops could also facilitate in helping students understand more about their feelings and emotions. One student explained:

I think mental health issues on campus are already very less stigmatizing as compared to the outside world. Still, I feel some interactive events and workshops can be organized because sometimes it may happen that a person is suppressing his stressful thoughts just not wanting to label them as something which requires professional help to cope with. I personally would like to participate in such workshops to feel comfortable about my feelings.

Question 3: What are some steps that the student body can take to improve mental health and wellness on campus?

[Insert Table 4 here].

Theme 1: Establishing student-led peer support groups

18% of students reported that student-led peer support groups may help improve mental health and enhance the well-being of students on campus. Some students mentioned that support from *peers* may be especially helpful, because fellow students share similar stressors, challenges, and experiences. As a result, these students believed that fellow students would be able to relate to the experiences of other students, enhancing their ability to provide support to other students. One student reported that student-led peer support groups could provide them with a space to "be more cognizant about each other's problems" and speak openly about their struggles. Another student mentioned, "The student body could organize support groups or buddy systems that could help some people struggling with mental health issues." Another student suggested:

The student body can organize itself into mental health support groups to guide individuals who may be apprehensive or scared to seek professional help for mental health issues.

# Theme 2: Enhance sensitivity to the needs of fellow students

16% of the students reported that students could be more empathetic, kind, and sensitive towards their peers in order to enhance well-being among students on campus. They mentioned that an insensitive attitude towards each other's struggles may contribute to poor mental health on-campus. One student said, "Stop peer pressurising, being sensitive about the culture of alcohol consumption, be sensitive about everyday struggles of mentally ill people, being more empathetic" could help enhance student well-being. Another student suggested, "Be more sensitive to others. Being kind never hurt anybody."

Theme 3: Organizing or participating in extracurricular activities and community-building events

13% of students reported that organizing and participating in extracurricular activities and community-building events can improve wellbeing on campus. Students expressed a desire to "spend more time on" activities involving "sports, music, and art" on campus that allow them to take a break from their tedious everyday schedules. For example, one student suggested that increasing "the number rejuvenation and recreation events on campus" will provide students with more ways to relax. Furthermore, one student mentioned that participating in "collaborative and community activities" that involve the student community can help improve the sense of community while also giving students the opportunity to unwind.

# Theme 4: Establishing a sense of community

12% of students reported that establishing a greater sense of community amongst the student body could improve mental health and wellness on campus. Students also mentioned that creating safe spaces on campus, in which students are encouraged to talk about mental health concerns openly and without fear of judgment, could help promote dialogue about mental health issues on campus. According to one student, "The student body should collectively come together and strive towards creating a safe space" for the student body to be able to easily "reach out and connect with others" in times of distress.

Additionally, some students highlighted how a lack of acceptance for different opinions and perspectives contributes to a fractured sense of belonging at the University. They mentioned that political and cultural differences often contribute to a diminished sense of community. For example, one student wrote,

[The] biggest thing [students] can do is to stop portraying their political/social outlook as representative of the entire [university name] community. More often than not, this becomes a major problem on campus. The campus has people from different parts of the

country, with absolutely different backgrounds. A greater amount of empathy and tolerance towards seemingly opposing views on part of the student body is advisable."

# Theme 5: Hosting information sessions/workshops relating to mental health

8% of students reported that there is a need for more information sessions/workshops that relate to mental health. Students expressed a desire to acquire knowledge about mental health concerns, learn about coping skills, and develop skills to support others. For example, one student suggested that "mandatory workshops to enable students to become first responders to panic attacks and other mental health breakdowns of their peers" would be helpful. Similarly, another student wrote that "student government or certain clubs can organize mental health awareness seminars and workshops on a regular basis."

Question 4: What can you do to improve mental health and wellness on campus? [Insert Table 5 here].

# Theme 1: Improving social behaviors

47% of participants reported that improving aspects of social life at the university would help mental health and wellness on campus. Some of the aspects of social life that they believe could contribute to enhanced well-being include checking in with others and actively supporting them (29%), being kind and considerate (17%), and intentionally meeting new people (3.5%).

Some students highlighted the importance of building a sense of community by checkingin with other students and supporting those who are struggling since, as one student put it,

"talking to people is what helps a lot of people at times." One student wrote that they could "talk
to more people, [since] everyone is struggling with something or the other and just needs
someone to hear them out." Another mentioned that they can "[ask others] how they are holding
up."

Other students mentioned that expressing kindness and respect for other students can bolster mental health and well-being. Examples of students' responses include "be kinder to people around," "address everyone with respect and kindness even if they are disrespectful," and "promote a good attitude towards people." Some students emphasized the importance of showing respect when interacting with students who are different from them. For example, one student stated that students should "not be biased or discriminatory in even the smallest sense." Another wrote, "as individuals on campus, [we should] try not to be a part of the negative culture, be it cancel culture or discriminatory elitism."

A few students mentioned that making an effort to increase social interaction and expand one's social circle by intentionally meeting new people could help improve mental health and well-being. For example, one student wrote "I would love to talk to more people in the [University name] community and build more friendships".

# Theme 2: Taking Time for Physical Health and Self-Care

18% of students endorsed the idea that prioritizing physical health and self-care could be helpful for improving campus mental health. Specifically, some students mentioned the importance of taking breaks (6%), sleep hygiene (4%), and exercising/physical activity (2%),

Students reported that finding free time to relax and focus on themselves may improve the mental health and well-being of the student body. They mentioned that forgoing any kind of "me-time," which could include time to simply unwind and relax, may impact one's wellbeing. For example, one student wrote, "At times, have 'me' sessions where we are just by ourselves and appreciating ourselves for what we have done." Another mentioned, "Make sure to take relaxation breaks so I do not overload my senses."

Students also reported that a tendency to maintain haphazard and unhealthy sleep schedules by college students may comprise their well-being. Relatedly, some students mentioned that having a healthy sleep schedule could improve well-being. Example responses include "prioritise sleep schedule" and "try and sleep for at least 6-7 hours everyday." Additionally, some students reported that physical activity and exercise could help students maintain mental health and well-being. Example responses include "Go for walks/ exercise and don't just stay stuck to your bed," "go to the gym," and "taking part in yoga sessions regularly."

# Theme 3: Educating Self and Others about Mental Health

oneself and other students, can contribute to improved mental health and well-being on campus. Students desired more knowledge about what mental health concerns are and how they should respond when they notice these problems affecting themselves or their peers. One student mentioned that "spreading awareness and promoting sensitivity about [mental health]" could be helpful. Another wrote that they could "read up on mental health concepts and disorders and know theory from myth." to enhance student well-being on campus. Another mentioned, "keeping myself informed is the best option on a personal front."

# Theme 4: Seeking Therapy at the College Counseling Center

6% of participants mentioned seeking professional help and support from the college counselling center as a strategy to improve mental health and well-being on campus. For example, one student mentioned, "In general, I make sure to advise my peers to seek help (at the University counselling center) when a problem gets way too serious and hinders their overall

being." Another responded, "Help support or guide friends to supporting bodies like [the university counseling center] for help."

Question 5: What material would you include in a course on mental health and wellness? [Insert Table 6 here].

#### Theme 1: Education about mental health

23% of students reported a desire to learn about mental health and improve their understanding of mental health problems. Students expressed that there is a lack of knowledge in terms of what various mental health problems (clinical and subclinical) look like, what their signs/symptoms are, and when it is appropriate to seek help. Students shared that they wanted to obtain "a basic understanding of several [mental health] disorders." Students also indicated an interest in learning more about different kinds of therapy, as well as techniques they could use to be first responders to support individuals who are distressed. One student shared that they wanted to learn how to be "sensitive and respectful towards [individuals facing] mental health issues." Another student shared that they wanted the course to "challenge misconceptions [around mental health]." Finally, some students believed that a course on mental health and wellness should include material about how commonplace phrases might trivialize the experiences of individuals experiencing challenges with their mental health. They mentioned, "certain terms that have become very colloquial are actually trivializing larger issues. [Examples include] T am feeling depressed'; T was traumatized after that class."

# Theme 2: Development of important coping skills

20% of students reported an interest in learning skills that could help them cope with stress. Some students mentioned time management skills and "strategies to cope with emotional duress." One student shared that they were interested in understanding "stress management, time

management, how to build healthy relationships [and] healthy coping strategies" in a course on mental health and wellness.

# Theme 3: How to help friends/peers with mental health concerns

13% of students reported a desire to learn how to better support their peers who may be dealing with a mental health concern. Students shared that they want to "[understand] signs of deteriorating mental health in self and others" and to "recognize when someone is dealing with depression, anxiety etc." They also indicated that they want to learn "how to act when someone has an anxiety/panic attack in your presence" and "how to speak to someone who is sad or anxious." Additionally, one student shared that they wanted to "be the most basic-level therapist for friends facing problems."

# Theme 4: Reaching out for help

12% of students reported that they want to learn how to reach out for support from mental health professionals. Students expressed interest in knowing when one should seek professional help as well as learning more about useful resources or "avenues for help". One student reported that obtaining support from a profession would be more helpful than relying completely on loved ones for help:

Further, individuals must be taught to seek help from professionals. A lot of students rely on friendships and other informal networks to better their mental health. This practice is toxic not only to the individual but also to the friend or caregiver. It is very important that students seek out professional help which can benefit them more than other means.

#### Discussion

We administered a survey to Indian college students to identify factors that contribute to mental health problems (Question 1), potential ways to improve mental health and wellness oncampus (Questions 2-4), and the content that students would find helpful in a course on mental health and wellness (Question 5). Each of these questions were asked using an open-ended format, such that students were free to list any ideas that came to mind. To our knowledge, this is the first study to apply a crowdsourcing approach to understand mental health on college campuses in an LMIC. Through this approach, we identified several distinct ideas relating to the causes of mental health problems among Indian college students as well as efforts to promote mental health and wellness. Importantly, many of these suggestions are related to cultural and contextual factors that operate at the university-level and are influenced by multiple stakeholders (e.g., faculty, administration, the student body as a whole). This finding is especially important given that much of the literature on college mental health and wellness interventions focuses on programs that target individuals (Rith-Najarian et al., 2019). Our findings suggest that college students often conceptualize mental health problems and interventions from a broader perspective and may be especially interested in organizational-level interventions that target the broader university ecosystem. Future research is needed to understand if such interventions are effective, as well as the extent to which our findings are consistent in different contexts (e.g., other institutions in India, institutions in western countries).

Academic concerns were reported as the most common factors that contribute to poor mental health on campus. Students commonly reported concerns around academic competitiveness, anxiety around grades, and the lack of academic accommodations for students experiencing mental health problems. The high rate of responses relating to academics may relate to aspects of Indian culture that emphasize academic success. Previous research has shown that high school students experience high amounts of academic pressure, especially due to the importance placed on academic excellence by parents (Deb et al., 2015). Some parents may set

rigid academic standards due to concern for the economic welfare of their children and their awareness of high rates of unemployment; other parents may wish to see their own unachieved goals or dreams fulfilled through their children (Deb et al., 2015). The strong focus on academic pressure in high school may stick with students as they enter college, fostering an increased sensitivity to academic concerns and an intense fear of failure (Reddy et al., 2018). On the other hand, the high rate of academic concerns reported may reflect the views of college students cross-culturally. Indeed, academic stress is a common source of concern among college students in high-income countries as well (Karaman & Watson, 2017). Future research is needed to better understand the source of academic stress in LMICs and high-income countries, as well as the pathways through which academic stress may lead to mental health problems.

The most commonly proposed ideas to improve campus mental health were: (a) improving social life, (b) increasing the number of counselors and increasing the availability of counseling slots, (c) providing academic flexibility and accommodations, (d) taking time for self-care, and (e) establishing student-led peer support groups. These responses—those that students mentioned most frequently—may be especially relevant for future research and mental health promotion initiatives. Furthermore, in our view, each of these proposed solutions appears to have promise in improving mental health and wellness on college campuses. Interestingly, the solutions differ in terms of the stakeholders that they involve (e.g., professors and administrators vs. students and student groups), as well as the resources required to implement them (e.g., hiring more counselors may be relatively expensive, while providing accommodations and establishing peer support groups may be relatively inexpensive). Considering the resources required to deliver interventions is becoming increasingly important in mental health promotion research, especially in low-and middle-income countries (see Wasil, Kacmarek, et al., 2021). Future work

will be needed to examine the effectiveness, cost-effectiveness, and feasibility of these mental health promotion strategies.

Many of the proposed solutions focused on academic concerns (e.g., flexible deadlines, academic accommodations for mental health concerns, greater understanding and awareness from faculty members). These findings highlight the potential importance of systems-level or interventions that involve multiple stakeholders (e.g., professors, administrators, and college students) and target aspects of university culture that may be contributing to mental health problems (e.g., grading policies, communication between students and faculty). For example, college counseling centers could launch programs and initiatives designed to raise awareness about mental health problems among administrators, faculty, and students (Kitzrow, 2003). New university-level policies and initiatives that allow for flexibility and accommodations could be created and broadly messaged to all stakeholders. Past research suggests that programs designed to raise awareness among faculty about academic accommodations for students with disabilities (e.g., programs that explain the rationale behind academic accommodations and how to provide them) may improve awareness and willingness to provide accommodations (Milligan, 2010). These systems-level interventions may be useful in promoting college student mental health, supplementing traditional psychological interventions that focus on the individual-level.

Students also raised several points relating to the university's social life and social culture. They mentioned that their university did not have a strong sense of community, and they expressed concerns about social divisions that were based on social, political, and geographic identities. They also described efforts that they believed could improve social life and a sense of community on campus. Their suggestions included supporting fellow students, participating in extracurricular activities, cultivating kindness, and reducing biases toward students from

different backgrounds. Students seemed especially interested in identifying effective ways to check-in with others and learning techniques to support students who are experiencing distress.

Many students reported that establishing peer support groups could be a valuable way to promote mental health on campus. Scientific literature on peer support programs suggests that they can be effective for addressing a variety of mental health concerns (Repper & Carter, 2011). One unique advantage of peer support programs is the shared experience between the peer counselor and the counselee. In some cases, individuals find it helpful and motivating to talk with others who have gone through similar experiences (Wasil et al., 2019a). As a result, peer counseling or "buddy/big brother-big sister" programs at universities could be a useful systems-level strategy to support students with mental health needs. Interventions designed to teach peer counseling and active listening skills (e.g., validation, open-ended questions, non-directive supportive listening) could be especially valuable. Previous research has shown that active listening interventions can be delivered scalably through online platforms (e.g., Bernecker et al., 2020). Furthermore, such skills can be taught in the context of broader interventions designed to promote mental health and wellness (e.g., Osborn et al., 2019).

Students expressed a desire to learn more about mental health issues, offering several specific examples of the kind of content they would like to see in mental health workshops. These include: a) understanding what mental health problems are, b) understanding how to recognize mental health problems, c) understanding common misconceptions and stigma about mental health, d) knowing when and know to reach out for help, e) knowing how to help friends and peers as "mental health first-responders," e) developing coping strategies to handle stress, and f) learning more about different kinds of effective treatments. Such findings are consistent with the idea that mental health awareness programs may be beneficial in India, where

knowledge about the signs, symptoms, causes, and treatments of mental disorders is generally low (Srivastava et al., 2016). In addition to improving their knowledge and awareness, college students appear to be interested in developing practical skills for handling mental health problems and supporting others. Mental health programs for college students may be most helpful if they include both psychoeducation (e.g., what mental illnesses are) and practical support tools (e.g., how to support friends and peers).

Students also raised several points relating to college counseling centers. Many students reported that hiring more counselors and increasing the availability of therapy appointments could improve mental health on campus. These findings reflect a broader literature on college student mental health. In western countries, mental health service utilization on college campuses has surged in recent years (Lipson et al., 2018), but this demand has not been adequately addressed by traditional university care systems, which tend to rely on face-to-face psychotherapy with a limited number of trained providers (Mistler et al., 2013). Furthermore, college students around the world commonly report reluctance to seek professional services and a preference to handle problems alone (Ebert et al., 2019), suggesting that self-help interventions may be especially appropriate. Fortunately, several publicly available digital self-help programs offer information about common mental health problems and include a variety of treatment exercises (Wasil et al., 2019b; Wasil, Gillespie, et al., 2020). However, recent data suggest that Indian college students may not be aware of these options or their potential utility (Wasil et al., under review). College counseling centers could play an important role in providing information about online and smartphone-based interventions. By promoting a variety of interventions (e.g., online self-help interventions, peer counseling interventions, professional counseling services), universities may be able to expand access to services and maximize the chance that a given

student finds an option that would be well-suited for them. To support these efforts, future research is needed to understand "what works for whom" in the context of college student mental health; such research could be useful in guiding students toward options that are most likely to help them (see Cohen & DeRubeis, 2018).

Our study should be interpreted with the characteristic of our sample in mind. First, about 64% of our sample identified as female; a predominantly-female sample is common in studies of college student mental health (Rith-Najarian et al., 2019). Second, with respect to nationality, the vast majority of participants identified as Indian. College students from minority backgrounds may have unique experiences on college campuses (e.g., discrimination, challenges relating to acculturation, difficulty finding a community), and these problems may have been unrepresented in our study. We observed that students commonly reported *lack of community* as a common concern; future research could explore if this concern is especially salient for participants from racial and ethnic minority backgrounds. Third, with respect to sexual orientation, our sample was fairly diverse, with about 30% of participants identifying as non-heterosexual. Fourth, regarding income, our sample was relatively wealthy. Students from low-income backgrounds may encounter economic challenges that influence their mental health (see Wasil, Venturo-Conerly et al., 2021), and these concerns may have been underrepresented in our sample. Moreover, students of lower socioeconomic status may be more likely to experience challenges as they transition from high school to college. As a result, the academic pressures that were noted in our study may be especially concerning for students from minority communities. Fifth, our sample reported elevated depressive symptoms, and about 60% believed that they had previously experienced a psychological illness. Thus, our findings may be especially relevant for contexts where student mental health is a major concern. Future research will be needed to understand the

extent to which our findings generalize in other samples. Such research could use crowdsourcing techniques, such as those used in this study, to characterize the views of college students from a diverse set of racial, socioeconomic, and geographic backgrounds.

Our findings should also be interpreted in light of our study's limitations. First, to our knowledge, our study is the first to apply a crowdsourcing technique in the context of a mental health survey with college students. With this in mind, future research is needed to understand how well our findings replicate in other samples, both in India and abroad. Second, our findings come from students at one liberal arts university in India. Our findings may not generalize to other Indian institutions, especially those with a pre-professional focus. Third, our sample was predominantly female. Although this gender imbalance is common in studies on college student mental health (Rith-Najarian et al., 2019), additional work is needed to understand the views of male college students (especially those who do not sign up for traditional college student mental health efforts or surveys). Fourth, we only solicited perspectives from college students. Future work could apply crowdsourcing techniques to better understand the views of university administration, faculty members, and other stakeholders. Fifth, we only obtained responses from students who opted-in to participating in the survey. It is possible that some groups of students (e.g., students with elevated mental health concerns, students that do not currently have mental health concerns, students with negative experiences with campus mental health initiatives) were less likely to participate; future studies could attempt to assess this potential self-selection bias. Finally, our crowdsourcing approach is meant to be hypothesis-generating rather than conclusive. Strategies that people prefer are not always the most effective, though they can be useful in generating input and ideas for further research and evaluation (see Stewart et al., 2019). In addition, commonly listed suggestions may not be the most feasible, effective, or appropriate.

Future work will be needed to understand which, if any, of the strategies that students generated are practical, operational and effective.

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**Tables** 

Table 1: Sample Demographics

	$M\left(SD\right)$ or $N\left(\%\right)$
N (completers)	141 (100%)
PHQ-9	11.32 (5.99)
Age	19.47 (1.21)
Sex	
Female	91 (64.54%)
Male	48 (34.04%)
Sexual Orientation	
Heterosexual	98 (69.50%)
Bisexual	12 (8.51%)
Biromantic	2 (1.42%)
Pansexual	2 (1.42%)
Demisexual	1 (0.70%)
Queer	11 (7.80%)
Nationality	
Indian	132 (93.62%)
American	5 (3.55%)
Senagalese	1 (0.71%)
British	1 (0.71%)
Bangaldeshi	1 (0.71%)
Income (Annual)	

Below INR 10,000	3 (2.13%)	
INR 10,000- INR 100,000	47 (33.33%)	
INR 1,00,000- INR 1,000,000	13 (9.22%)	
Above INR 1,000,000	76 (53.90%)	
Previously Diagnosed w/ Psychological Illness		
Yes	31 (21.98%)	
No	97 (68.79%)	
Previously Experienced Psychological Illness		
Yes	85 (60.28%)	
No	40 (28.37%)	
Currently Diagnosed		
Yes	21 (14.89%)	
No	107 (75.89%)	
Taking Medication		
Yes	12 (8.51%)	
No	83 (58.86%)	
Receiving Therapy/Treatment		
Yes	29 (20.57%)	
No	102 (72.34%)	

Table 2: Factors that contribute to mental health problems

# Question 1: What are some aspects of student experiences at Ashoka that you think could contribute to mental health problems?

Coll (A) 1 1) Fig. 1 B	
Code (% endorsed)	Example Response
Academic Pressure (57%)	Academics at [the university] demands a strong work ethic and leaves very little room to slack off. On one hand, this helps develop useful skills but on the other, it leaves those students who have periods of very low motivation feeling like they're overloaded with work if they miss a few classes and it becomes impossible to catch up.
Lack of community (26%)	The community is too splintered. Divided based on social groups as well as ideological groups. Leading to feelings of stress and exclusion.
Party culture and substance abuse (11%)	The culture around substance abuse could make some people feel peer pressured into doing things they don't want to do.
Geographically isolated campus (11%)	The isolation of Ashoka from the rest of [the city] may not allow for people to spend time unwinding, that other colleges are able to provide.

Table 3: Proposed ideas university officials could use to improve mental health on campus

Question 2: What are some steps that the Ashoka administration/ faculty/ counselling centres can take to improve mental health and wellness on campus?

centres can take to improve mental nealth and wellness on campus?	
Code (% endorsed)	<b>Example Response</b>
Hire more counsellors (29%)	Get more therapists and not only counselors. the ratio of counselors to students is abysmal, and we should get more therapists.
Promote academic flexibility and accommodations (24%)	I would definitely appreciate it if making accommodations or asking for extensions for papers or exams becomes easier. It's not easy at all coming up and asking faculty or anyone to make accommodations. I feel useless and bothersome when I do that, as though I am not good enough as the others who are doing fine amidst all this.
Increase slots for in-person therapy (23%)	The [college counseling center] should increase the number of slots and also the number of counselors as I feel like they are not able to match the current demand for mental health resources required for the student body at [the University].
Increase understanding and accommodations for students' mental health needs (19%)	The faculty and the administration should acknowledge that there is a mental health crisis on this campus and more empathetic towards mental health problems and stop with the dismissive attitude we usually get.
Conduct mental health workshops/activities (7%)	We need some people to be more understanding of certain situations. If not already, then I think all people on need some workshops to understand the basics of mental health, and how to be more compassionate.

Table 4: Proposed ideas the student body could use to improve mental health on campus

Question 3: What are some steps that the student body at Ashoka can take to improve mental health and wellness on campus?

Code (9/ and aread)  Eventual Degrange	
Code (% endorsed)	Example Response
Establish student-led peer support groups (18%)	The student body can organize itself into mental health support groups to guide individuals who may be apprehensive or scared to seek professional help for mental health issues.
Conduct information sessions/workshops relating to mental health (18%)	The student government or certain clubs can organize mental health awareness seminars and workshops on a regular basis.
Increase sensitivity to the needs of fellow students (16%)	Be more sensitive to others. Being kind never hurt anybody.
Organize or participate in extracurricular activities and community-building events (13%)	More activities to improve the sense of community on campus. Unlike most small campuses, [the University] fails to create that sense of belonging that most universities have, irrespective of their size.
Promote a sense of community (12%)	An active attempt to reach out and connect with others is a step that the student body can take.

Table 5: Proposed ideas that an individual student could use to improve mental health on campus

Question 4: What are some steps you can take to improve mental health and wellness at Ashoka?

Code (% endorsed)	Example Response
Improving social behaviors (47%)	Just be kind and accepting of others. Students on campus can best understand other students' situations if we try to.
Take time for physical health and self-care (18%)	At times, have own 'me' sessions where we are just by ourselves and appreciating ourselves for what we have done. Thank ourselves every day for existing.
Educate oneself and others about mental health (11%)	Read up on mental health concepts and disorders and know theory from myth.
Seek therapy at the college counseling center (6%)	In general, I make sure to advise my peers to seek help with [the college counseling center] when problem gets way too serious and hinders their overall being.

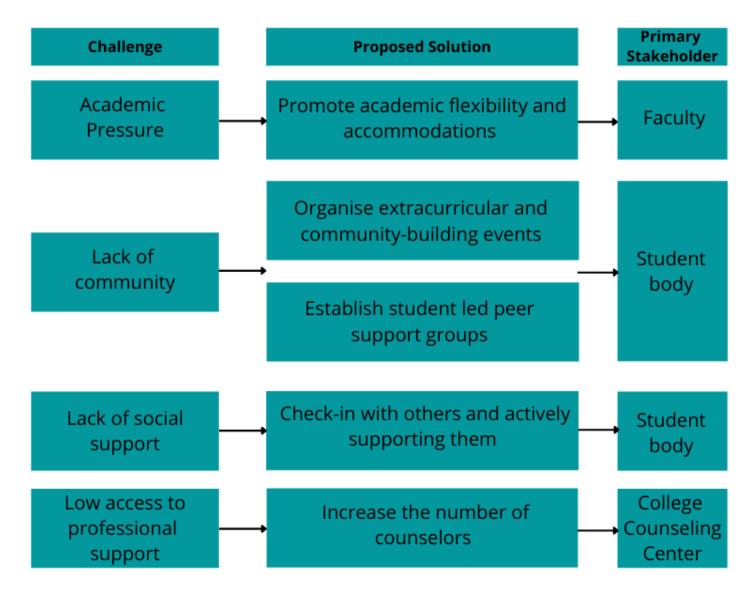
Table 6: Proposed content for a course on mental health and wellness

Question 5: If Ashoka were going to include an optional course in mental health and wellness promotion, what should be included in that course?

Code (% endorsed)	Example Response
Information about mental health conditions and interventions (23%)	The basics of mental illness, therapy models. So often people live their entire lives not knowing that they have some kind of mental illness.
Effective strategies to improve mental health, academics, and relationships (20%)	Stress management, time management, how to build healthy relationships, healthy coping strategies.
How to help friends/peers with mental health concerns (13%)	A very important topic could be 'how to help a friend dealing with a mental health issue.'
How to reach out for help (12%)	Further, individuals must be taught to seek help from professionals. A lot of students rely [solely] on friendships and other informal networks to better their mental health It is very important that students seek out professional help which can benefit them more than other means.

# **Figures**

**Figure 1:** Student-generated themes from mental health crowdsourcing survey



Caption: Figure 1 summarizes key themes from the crowdsourcing survey. Students described challenges that reduce mental health and wellness on campus (left column), proposed solutions that could improve mental health and wellness on campus (middle column), and relevant stakeholders who could implement those solutions (right column).