MENTAL HEALTH TREATMENT AVERSION AMONGST COLLEGE STUDENTS

By

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APPROVED

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Abstract

Objective: This study examined a number of factors contributing to mental health treatment aversion amongst students at University of California, Riverside. Method: 103 participants were recruited from the psychology subject pool as well as through emails to different organizations, and participated in an online questionnaire. This survey consisted of multiple choice and open-ended questions regarding their personal experiences with mental health, possible factors that might have influenced their decision to seek treatment for mental health, emotions, overall physical health, overall satisfaction with life, and personality traits and characteristics. Results: Over half of participants had experienced problems with mental health at some point, and the majority of the problems experienced were anxiety, depression, or a combination of the two. A number of factors contributed to mental health treatment aversion, including reluctance to acknowledge a problem and fear of seeking help. Conclusion: There are multiple factors that contribute to mental health treatment aversion, and these are not necessarily independent of one another. Possible future interventions to reduce these factors should be approached from an intersectional lens.

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Introduction

College students represent a diverse assortment of young adults who attend their respective universities to gain an education and to gain the necessary tools for entering the professional world. There is, however, a high amount of pressure at these institutions, and there are many stressors that can rapidly build up. Results of these stressors are often problems with mental health, most commonly anxiety and depression. Despite the high prevalence of these issues, few college students seek treatment for them. There have not been many studies conducted to determine the reasons behind this, and to determine if there are measures that universities can take in order to encourage more students to either seek treatment for their mental health problems or to provide feedback about how their respective universities can best support their mental health struggles.

Studies on the efficacy and adequacy of mental health treatment on college campuses have indicated that such treatment is barely adequate at best. [17] Despite the high numbers of college students who have mental illness, less than half of those diagnosed seek treatment, and it has been speculated that universities do not provide the necessary and appropriate amount and type of resources that can assist in reducing the number of untreated cases. [17] Without these necessary resources and programs, numbers of students with untreated or even undiagnosed mental illnesses will increase.

It can be difficult to learn that one is at risk for mental illness, and perhaps even more so to get diagnosed with one or more of these conditions. Uncertainty management and information avoidance models have often been used as a possible explanation for health behavior in general, [1, 4, 5, 6, 7, 8] and some of these concepts can also be applied to mental health treatment avoidance. Avoidance of information has the potential to prevent the reception of unpleasant and unwanted news, and maintaining uncertainty can decrease chances of distress and negative emotions. [1] While studies have indicated that some forms of information avoidance occur automatically and that avoidance may be influenced by a number of uncontrolled processes, [7] there are also health information behaviors that are more

intentional. Acknowledgment of unpleasant and unwelcome information, a characteristic that mental illness diagnosis holds for some, can be difficult for many people, since acknowledgment of such information can also lead to undesired outcomes such as a change in beliefs or lifestyle. [8] Other personal and emotional factors that could increase information avoidance are fear of receiving an unwanted diagnosis and the concern that such a diagnosis would indicate a personal failure. Recognition of one's need for mental health treatment could exacerbate these unwanted and uncomfortable emotions, and again contribute to emotional distress. [8]

Outside factors also play a role in medical information avoidance, including one's perception of how others will judge an individual with mental illness(s), as well as perceptions of the resources intended to alleviate mental health distress. [8] Overall life satisfaction could also play a role in avoidance of mental health treatment, since studies have indicated that if other areas of life are going satisfactorily, it is easier to engage with resources that could alleviate mental health distress. [8] Other stressful life factors could potentially exacerbate mental health distress, making it more difficult to establish effective coping mechanisms and to seek treatment options.

When it comes to college students, acknowledging the presence of a mental illness could potentially cause unpleasant emotions, including worry over academic performance and how their newly-diagnosed mental illness could have an impact on performance. Studies have indicated that students with diagnosed mental illness, whether diagnosed years previous or recently, tend to perform poorer academically and report lower measures of academic success, such as grade point average. [19] While some studies have focused on a specific class cohort, it has been discussed that poorer academic success in the presence of a mental illness can be applicable to all class levels. Acceptance of information regarding mental illness diagnosis can create many changes in lifestyle due to new requirements for accommodations. [3, 4, 8,] It is becoming increasingly common for universities to provide accommodations for students with different types of mental illness in the form of increased time for exams or separate test-taking rooms. However, the sometimes confusing or difficult process of obtaining

these accommodations could prevent students from seeking them and could further increase distress related to a mental health diagnosis. This could also be a potential reason for avoiding treatment for mental health, for acknowledgment of a problem might create new ones.

Studies have suggested that a primary reason for adults avoiding treatment for mental health is that they do not perceive a need for treatment, do not make contact with health professionals after initial diagnosis, and a fear of the stigma associated with diagnosis of a mental illness. [2] While college students are technically adults, there are differences within their environment that do not fall under the generalities of adulthood. Furthermore, students typically spend four to five years on campus, and if they seek mental health treatment they may have to change physicians and therapists multiple times based upon limited availability and resources. One study indicated that continuity is important in maintaining not only effective doctor-patient relationships but also in adhering to treatment recommendations, [12] and the potential for lack of continuity of care in college students could result in a decision to avoid treatment seeking.

Over half of the disease burden amongst college-aged individuals is represented by mental illness, with one study indicating that as few as 10-24% of students receive treatment, while over half never receive treatment. [1,14] Contributing factors are lower socioeconomic status, relationship stressors, lower social support, and sexual violence. [1] Two national surveys conducted (the National Comorbidity Study and NCS-R in 1992 and 2002, followed by the National College Health Assessment through American College Health Association) indicated that there is a high prevalence of untreated mental disorders on college campuses and low treatment rates. [1] The Healthy Minds Study conducted by Hunt and Eisenberg (2010) indicated that fewer than half of the students that screened positive for some type of mental illness received treatment, often reporting a lack of time, concerns over their privacy, and financial constraints as reasons for not seeking treatment. [1] Other concerns revealed in this study as well as other studies included the perception that treatment is not necessary, lack of awareness of services offered on campus, lack of knowledge regarding insurance coverage, and overall skepticism over the effectiveness of

treatment. Students also expressed a concern about stigmatizing attitudes towards mental health, which could increase treatment aversion. [1, 2, 16] Some students may have a fear that peers and other members of campus communities will discover the presence of mental illnesses, especially if there have been negative attitudes toward them conveyed through different communities throughout the campus.

Many college campuses have been taking action to reduce the prevalence of mental illness on their campuses, and different approaches have been considered when deciding the best possible approach. While every campus has a different culture, not to mention different financial and environmental means, studies have examined potential approaches that could be applicable on a larger scale. Implementation of programs that are targeted towards stress reduction has been proven to reduce anxiety as a whole [15], and intersectional approaches have also been encouraged. The intersection of behavioral, mindfulness, and cognitive interventions have also proven beneficial [15] since this approach is able to encompass a larger number of mental health symptoms.

Another approach that has been considered and implemented on a number of college campuses is gatekeeper trainings (GKT), based upon the Question, Persuade, and Refer (QPR) model of intervention for mental illness. While this model is primarily centered on suicide risk response, similar principles could be applied in response to mental illness in general. The QPR model is focused on brief but beneficial intervention and is targeted towards immediate crisis management and proper referral to appropriate resources, [21] which can lead to a reduction in potentially tragic outcomes. Implementation of QPR based programs also has a strong public health benefit if these approaches aid in reducing the mental health disease burden within college campus communities.

In addition, there is the mass saturation of awareness public health model, which demonstrates the benefits of multiple individuals being informed and aware either under QPR guidelines or through gatekeeper trainings (GKT). [18, 21] If there is more awareness, then there is also the potential for a decrease in unwanted outcomes of untreated mental illness. While QPR program trainings are intended for professional staff interventions, the GKT model that arose from this can be applied to many different

individuals. The founder of the QPR model, Dr. Paul Quinnett, stated that if more people are trained as gatekeepers, then there is a higher chance of people with mental illness being identified by members of their respective communities, and that with more trained individuals, the amount of people with undetected mental illnesses could potentially decrease. [21] Thus arose the GKT model.

The GKT model, based on the QPR model, also stemmed from attachment theory principles, which state that there is greater comfort in sharing emotions and feelings with close acquaintances or with members of one's own community. This model also incorporates the Mental Health First Aid (MHFA) model, which seeks to provide immediate care that will assist in a mental health problem until adequate resources are attained. [18] These approaches are intended to be implemented in trainings for individuals with ties to different communities, and unlike solely QPR-based trainings, are meant for non-professionals. Residential Advisors (RA) are often equipped with this type of training due to close proximity with large numbers of students, [18] and through this training are given proper methods on how to handle mental health problems and are informed on the most appropriate resources to which to direct students.

While the results from studies conducted on the benefits of these trainings did not show a significant impact within the general campus population, there is a potential for improvements to the trainings that could increase their efficacy. One possible option would be the implementation of GKT in peer groups throughout campuses, such as those found in different cultural, gender-oriented, and wellness departments. Evidence of such programs can be seen at University of California, Riverside, in which peer-led organizations are given trainings on crisis management and directing fellow students to appropriate resources. Examples of this approach include peer groups run through The Well, a department focused promoting mental and physical wellness through education and empowerment, the Sexual Assault and Violence Education (SAVE) peer education group, and mentorship organizations such as those run through Chicano Student Programs and African Student Programs. Students are more likely to disclose emotions and concerns to other students who have similarities to them [18] rather than to a

professional staff member, and thus encouragement of an increase in prevalence of GKT throughout campuses in general could result in increased utilization of campus mental health resources and a reduction in mental illness rates amongst college students.

Overview and Hypothesis

This study conducted at the University of California, Riverside seeks to examine reasons behind mental health treatment avoidance on this campus in particular, and analyzes a number of potential contributing factors. There are a number of mental health resources offered at UC Riverside, and efforts have been made campus-wide to spread awareness of the mental health services offered by these different departments. While there have been other studies similar to this one conducted to determine the factors of mental health treatment avoidance amongst college students, this one is focused on responses from students at UC Riverside.

Through this study we hoped to gain an understanding to the factors that might contribute to college students refusing to seek treatment for mental health issues, and to examine possible actions that could alleviate some of their hesitation.

Method

Participants

Participants (*N* = 103) were recruited through the psychology subject pool (participation granted 0.5 credits) and by sending the survey questionnaire to various student groups and listservs. These groups included the UC Riverside Concert Band, the Campus Advocacy, Resources and Education (CARE) student staff, the CARE Empowerment and Healing community, and the CARE general mailing list, as well as personal connections. All participants were students enrolled at UCR.

Procedure

Participants were given an opportunity to participate in this study that focused upon mental health treatment aversion. Progression to some of the questions in the survey was conditional upon previous answers (e.g. if a participant answered "no" to a question regarding past mental health history, the survey was concluded for that particular participant; if a participant answered "yes" to the same question, they would be prompted to continue on with the questions in the survey). All participants read and completed a consent form at the beginning of the survey. All procedures were approved by the IRB at University of California, Riverside.

Measures

Measures utilized here were used to determine the factors that could overall contribute to resistance to seeking treatment for mental health issues. They are presented in the order and blocks in which participants viewed them.

Mental health history. Participants were asked 9 questions regarding previous mental health history and current mental health. If participants answered "no" to question 1, which asked if they had history of mental health issues, the survey was concluded for those participants. These questions included multiple choice questions with "yes" or "no" as options, open-ended questions that allowed participants to expand upon the timespan and nature of their mental health issue, and questions regarding reasons behind not seeking help, which were as follows: "I didn't think it would help," "I had a bad experience previously," "I don't like healthcare professionals," "I don't trust healthcare professionals," "I felt like other people would see me differently if I sought treatment," "I felt like my family would be unhappy or uncomfortable with me seeking treatment," "People like me don't seek mental health treatment," "I couldn't afford treatment," and "I didn't know how to go about getting treatment," and "Other" (allowed participants to specify).

Additional mental health items. This section consisted of 7 questions, which focused on reasons for not seeking help for mental health more recently. These questions were measured by scales to assess

the extent of mental health concerns and degree to which various considerations played into decisions to seek treatment (*much worse, moderately worse, slightly worse, about the same, slightly better moderately better, much better*, and *strongly disagree, disagree, somewhat disagree, neither agree nor disagree, somewhat agree, agree, strongly agree*). There was also a multiple choice question with "yes" or "no" as an option regarding knowledge of resources on campus, and an open-ended question on the same topic.

Emotions. This section consisted of questions that measured participants' current emotional state, adapted from the Affect Adjective Scale (Diener & Emmons, 1985) with a range of emotions that included the following: happy, worried/anxious, pleased, angry/hostile, frustrated, depressed/blue, joyful, unhappy, and enjoyment/fun. These emotions were measured using the following scale: *strongly disagree, disagree, somewhat disagree, neither agree nor disagree, somewhat agree, agree*, and *strongly agree*.

Health and sleep. This section consisted of questions that focused on the overall health and sleep patterns of participants. The following symptoms were assessed: upset stomach, backache, headache, acid indigestion, diarrhea, stomach cramps, loss of appetite, shortness of breath, dizziness, chest pain, flu or cold symptoms, and muscle pain. Options provided were either "yes" or "no." The next question measured quality of sleep, and was measured using the following scale; *very good, mostly good, somewhat good, neither good nor bad, somewhat bad, mostly bad*, and *very bad*. The last question measured overall quality of health within the last week using the following scale: 1 (*excellent*) to 7 (*poor*).

Social support. This section consisted of questions that measured the type and amount of social support each participated perceived themselves as having (e.g., "There is a special person who is around when I am in need," "There is a special person with whom I can share my joys and sorrows," "My family really tries to help me," "I get the emotional help and support I need from my family"). These questions focusing on social support were measure by the following scale: *strongly disagree, disagree, somewhat disagree, neither agree nor disagree, somewhat agree, agree*, and *strongly agree*.

Demographics. This section consisted of 13 questions that focused upon the demographics of the participants. Demographics examined were as follows: age (open-ended for participants to manually enter), gender (male, female, other [open-ended for participants to manually enter]), race/ethnicity, mother's race/ethnicity, father's race ethnicity, relationship status, religious affiliation, religiosity and spirituality (1 = *not at all*, 7 = *extremely*), and subjective socioeconomic status (1-10).

Results

Demographics

Participants ranged in age from 18-25, with participants predominately being 18-21 years of age. Participants primarily identified as female, with less than half of participants identifying as male, and a small amount who identified as "other." For race/ethnicity, the majority of participants identified as Asian (49%), followed by those who identified as Hispanic or Latino(a) (37%), followed by those who identified as White/Caucasian (11%). The majority of participants were not in a relationship or never married (53%), followed by those who were in a relationship but not married (43%) For religion, the majority of participants were not affiliated with a religion, closely followed by a high number of participants affiliated with Catholicism. Judaism had the lowest number of affiliated participants. For religiosity, the most common response was "1" or not at all, and the least common response was "7" or extremely. For spirituality, the most common response was a "4," and the least common response was a "7." For socioeconomic status, the majority of responses were a 5, with no selections of 1 or 10.

Mental Health History

Of the 103 participants in the study, less than half selected that they had never experienced problems with their mental health (n = 34, 33.01%) , while the majority selected that they had experienced problems with their mental health (n = 69 66.99%). Times varied in duration of mental health problems, ranging from as little as a couple of weeks to longer periods of time such as multiple years. The nature of problems experienced were predominately anxiety (39%), anxiety and depression combined

(33%), and depression (19%). Other problems described were sadness/lack of motivation, depression/suicidal thoughts, and family issues, each represented by 3% of participants (Figure 1). There was a higher percentage of participants who did not seek help for mental health problems, with less than half having sought treatment (*n* = 30, 43.48%) and a majority not having sought treatment (*n* = 39, 56.52%).

Less than half of participants were currently experiencing mental health concerns (*n* = 35, 33.98%); a majority did not have current mental health concerns (*n* = 68, 66.02%). The nature of problems currently experienced by participants were as follows: anxiety and depression combined had the highest prevalence (35%), followed by anxiety alone (32%), then depression alone (27%; Figure 2). Family issues also had representation (6%). When asked if mental health had become better or worse since coming to college, a majority of participants selected "slightly worse," with "about the same" being the next most selected answer. The smallest frequencies of answers were in the "much better" and "much worse" options (Figure 3).

Factors Influencing Treatment Seeking

There were four sets of questions regarding social, cultural, past experience, and personal factors that might influence seeking treatment (see Table 1). In the social factors category, the factors that most influenced treatment aversion were the sigma surrounding mental health and a fear of being treated differently. The factors that least influenced treatment aversion were perception of gender roles and fear of judgment from professors and teaching assistants.

In the cultural factors category, the factors that most influenced treatment aversion were worry over disappointing family, fear of being perceived as weak, and refusal to acknowledge a problem. Factors that least influenced seeking treatment were lack of access to treatment options and obstacles from family in seeking care.

In the past experiences category, most participants selected “disagree” and “strongly disagree.” However, a factor that did seem to influence avoidance of treatment was lack of exposure to mental health resources earlier in life. Factors that least influenced treatment avoidance were inappropriate handling of a mental health issue and fear of authority figures.

In the personal factors category, factors that most influenced treatment aversion were fear of acknowledging a problem, fear of asking for help, resistance to seeking help, and believing that one could handle the situation on their own. A less influential factor was resistance to trying different methods for management and treatment. Full results are noted in Table 1.

Awareness of Available Resources at UCR

Over half of participants indicated they were aware of the resources available on campus (*n* = 72, 69.9%). Resources named were Counseling and Psychological Services (CAPS), The Well, the Campus Advocacy Resources and Education (CARE) department, Student Health Services, and the Case Management Department.

Emotions

Emotions that had the highest number of “agree” selections (including “somewhat agree,” “agree,” and “strongly agree”) were happy, worried/anxious, frustrated, and joyful (Table 2). Emotions that had the highest number of “disagree” selections (including “somewhat disagree,” “disagree,” and “strongly disagree”) were angry/hostile and depressed/blue.

Health

Participants were asked questions regarding their physical health within the past week of taking the survey and were presented a list of symptoms to either select “yes” or “no.” The most commonly experienced symptoms were headache, loss of appetite, and backache, with quite a few participants also selecting nausea or upset stomach. Least commonly experienced symptoms were stomach cramps (non-

menstrual), diarrhea, acid indigestion or heartburn, and chest pain. The other symptoms examined ranged in frequency, as can be seen in Figure 4. Also in this section participants were asked to rate the overall quality of their health within the past week of taking the survey on a 1 (*excellent*) to 7 (*poor*) scale. The highest amount of participants rated their health as 3, with the next highest amount rating their health as 2. 1 and 6 had the lowest response rates.

Quality of Sleep

Participants were asked questions regarding their quality of sleep within the past week of taking the survey and rated their perception of their sleep on a scale ranging from very good to very bad. The answers were centered primarily in the middle of the scale (Figure 5), with the largest number of participants selecting "somewhat good." "Very bad" and "mostly bad" were infrequently selected, and "very good" had the lowest response rate of all the answer choices.

Social Support

For this block of questions the majority of participants answered "somewhat agree," "agree," and "strongly agree" regarding the amount and levels of social support that they have. Compared to the rest of the options in which participants disagreed with statements, participants indicated that they had the most emotional help and support from family and also talking about their problems with their family. Further results can be seen on Table 3.

Discussion

This study utilized a survey in order to determine factors that contributed to mental health treatment aversion amongst college students at University of California, Riverside (UCR). A number of factors were considered, and the uncertainty navigation and information avoidance models were used as a guide. Overall, the majority of mental health problems reported were depression and anxiety, or a combination of the two.

In terms of societal stigma, there were a large number of participants who agreed with the statement that stigma surrounding mental health, as well as a perception of appearing weak amongst their peers, were factors that influenced their decision to seek treatment. This is reflective of results in other studies, [1, 2, 16] emphasizing that social culture plays a significant role in seeking mental health treatment. In order to reduce this societal stigma and to create a culture of acceptance on college campuses, implementation of campaigns, panels of mental health professionals, and opportunities for discussion regarding de-stigmatizing mental health could influence greater utilization of campus resources. These actions could also generate discussion between students, staff, and faculty regarding the most effective way to provide for students without instilling fear of reaching out for help. UCR has been known to promote mental health wellness as well as a culture of acceptance, through the presence of The Well health and wellness department and through events such as the Self-Care Fair, which featured activities intended to create calm and stress-free environments. Perhaps this promotion of such a culture influenced participants' answers in a more positive direction.

In terms of cultural norms influencing participants' resistance to seeking mental health treatment, worry over disappointing families seemed to be a strong factor. This could be related to the fear of being perceived as weak, since many students rely on families for various types of support whilst in college. There could potentially be the worry that if families were to find out about the presence of a mental illness, then the student would be treated differently and support could change. In some cases this change could be positive, while in others it could be negative and in turn affect many aspects of the student's time in college. Perhaps in some cultures there is a belief that seeking mental health treatment is a sign of weakness, and thus if students were raised with this mentality instilled in them, then they might be less likely to seek treatment. However, participants disagreed with the statement that there were family obstacles to seeking care, which raises several questions. Perhaps families are accepting and willing to acknowledge that their student is choosing to seek or not seek treatment, or since families are unaware of mental illness, then they are not able to put up obstacles to seeking treatment. Perhaps an intervention that

could prove helpful in this instance would be to encourage discussions with cultural offices on campuses on mental health within specific communities and how to address these issues within families.

In terms of past traumatic experiences, this did not seem to be an influential factor in avoiding mental health treatment. However, this does not mean that these factors are not influential to any college students in seeking mental health treatment. Traumatic experiences, which can take a number of different forms, could affect a student's desire to seek treatment for a fear of repetition of the experience, or the possibility of flashback to earlier trauma. It is unclear as to why few students in my study reported these experiences as a factor in seeking treatment for mental health care, but it is possible that participants were unwilling to acknowledge the presence of trauma, or were unaware that handling of a mental health issue might have been inappropriate.

In terms of fear of physicians or authority figures in general influencing students' decision to seek treatment, participants in this study generally disagreed that this was a contributing factor to their decision regarding treatment seeking. This was a result that was found not only in fear of physicians and authority figures, but also in fear of judgment from professors and teaching assistants. This was a surprising result, since it seemed before this study that students might have a fear of addressing a sensitive topic such as mental health, specifically mental illness, with figures of authority, especially those who play a role in their collegiate success. However, this result cannot be claimed as pertaining to college students in general, and perhaps current discussions surrounding acceptance of mental health within college campuses has started to have a positive impact. For some classes at UCR, addressing mental health is encouraged, and some faculty list mental health resources available on and off campus on their syllabi. According to results from this study, over half of participants indicated that they were aware of mental health resources on campus, which could be a result of this promotion of resources through figures of authority. In addition, many of the staff at the student health center and the CAPS office present themselves in a friendly and approachable manner, which studies have indicated results in better doctor-patient relationships and communication as well as greater adherence to treatment plans. [9,10,11,13]

These encouraging attitudes could be proving beneficial towards encouraging the utilization of resources on campus.

In terms of financial insecurity playing a role in treatment aversion, the answers were more widespread, although participants generally agreed that this was only slightly influential in their decision to not seek mental health treatment. This result was also somewhat surprising, since financial means tend to be limited with students, especially for those who do not receive adequate financial aid or who are required to maintain jobs while also attending classes. Counseling and therapy sessions range in price, sometime even approaching $250 per session for those who do not have insurance coverage, [23] and this is a considerable amount of money, which might cause hesitation in students who are both uninsured and limited financially. However, a factor that could have limited the influence of financial considerations is that participants may have been covered under UCR's Student Health Insurance Program (SHIP), which covers eight counseling visits through CAPS per year. Without worry over financial burden, UCR students might not consider this a highly influential factor in treatment aversion.

Further results that were interesting and potentially significant were found in answers to questions regarding personal factors, emotions, quality of sleep, and amount of social support. Awareness of these results could result in improved tailoring of resources and trainings that could target a wider campus audience. Furthermore, these results are not necessarily independent of one another; rather, they can intersect with one another, which demands a multidimensional approach to increasing treatment seeking. With regard to personal factors, many participants indicated that fear or refusal to acknowledge a problem, fear of asking for help, worry that a mental health issue would not be able to be resolved, and a belief that they could handle their problems on their own were all factors that might have influenced their decision to not seek help. This was similar to results in other studies, which indicated that a potential reason for college students not seeking help was lack of a perceived need for treatment, which could stem from fear or refusal to acknowledge the presence of a problem. [1,16]

These factors also tie into the uncertainty navigation and information avoidance models, which state that maintaining uncertainty, which in this case could be applied to fear of a problem and fear of asking for help, can often result in the delay of receiving unpleasant information, which can in turn lead to information avoidance—in this case refusal acknowledge a problem. Avoiding information and maintaining uncertainty could also maintain pleasant feelings, and might not require changes to beliefs and lifestyle. [3,4,5,6,7,8] In order to reduce these fears and to encourage acknowledgment of mental health concerns, perhaps an increase in workshops as well as an increase in the scope of target audiences could lessen these fears and could continue to increase the culture of mental health acceptance at UCR and other college campuses as well. In terms of social support, most participants agreed that they had at least adequate if not considerable social support, which could result in encouragement from social support systems to seek treatment for mental health, which in turn could alleviate fears of acknowledgment and of asking for help. This could also have a reverse effect of decreasing seeking treatment, since students might not feel a need for outside help if they already feel supported by their peers and families.

Other results that seemed to have influence on treatment aversion based on this study, and could also be considered, related were emotions and quality of sleep. Surprisingly, the majority of participants reported that had a somewhat good quality of sleep, which can be rare in college due to the pressure of academic rigor. However, a factor to be considered with result is the timing of the survey, which was during week four and five of the quarter. Perhaps midterms and term papers had not yet occurred, which could have resulted in less stress and in better quality of sleep. Some of the reported emotions were positive, such as happy and joyful, which could deter people from seeking treatment if they are not currently expressing symptoms associated with mental health problems. However, there were also a lot of participants who reported more negative emotions such as worry/anxiety and frustration, which could influence treatment aversion in several ways. On one hand, these could result in a desire to seek help in order to alleviate these negative emotions, but on the other hand could also contribute to the other factors

discussed above that resulted in treatment aversion. All of these factors could contribute to mental health treatment aversion, since people might not feel in control over their mind and emotions, and seeking help could be perceived as too overwhelming and not beneficial. It is unclear as to an effective strategy for alleviating these factors, but perhaps further promotion and frequency of stress-reducing programs and activities campus-wide could aid in reducing some of the stressors associated with college life.

Although there are a large number of factors that influence mental health treatment aversion, perhaps there are interventions that could be implemented to begin reducing some of these factors. Some possibilities have been discussed above, but another option to consider would be the more widespread implementation of gatekeeper trainings (GKT) throughout the campus community. Since this study indicated that a large number of participants had social support in at least one form, peer groups who undergo GKT could aid in reducing some of these deterrents to treatment. In addition, if students are more comfortable disclosing information to those they are closer to and/or can identify with, [18] then they might be more willing to seek help after talking with peers who can guide them to appropriate resources.

Limitations

There were limitations of this study that could potentially have had an effect on study outcomes. First, there is always the risk of self-reporting bias when participants are asked to complete a survey, in which participants might be tempted to select what they believe is the desired answer. [22] Additionally, since this survey covered a sensitive topic, they might have not answered completely honestly in order to avoid triggering unpleasant emotions. Another possible limitation stems from the fact that a majority of participants took part in this study in order to gain half a unit of research credit for introductory psychology classes, which have motivated them to answer the survey quickly and without much consideration of their answers.. The limitations of this study emphasize the potential for future studies of this nature to be conducted at UCR, which could incorporate a larger age range, as well as focus on

mental health treatment aversion in specific demographics such as women, underrepresented racial and ethnic minority groups, and minority religious groups.

Conclusion

This study utilized a multi-question survey that examined a diverse set of factors that could influence mental health treatment aversion among students at University of California, Riverside. Results from this study indicate that there are a multitude of factors that contribute to mental health treatment aversion on the UCR campus specifically, although many of the results were similar to results from previous studies on different campuses. It has become evident that these factors are not necessarily independent of one another; rather, they are intersectional in nature and should be approached with this complexity in mind. If an intersectional perspective is not utilized, then there is a risk of minimizing the efficacy of interventions.

Results of this study could influence discussion of new approaches to reducing mental health treatment aversion from an intersectional lens. While steps have been taken at UCR in this direction, findings from this study indicate that there is still progress to be made, inviting further studies to be conducted at UCR on this subject. Further studies focusing more on specific demographics and other factors than the ones examined in this study could also open more conversation on continuing to cultivate a culture of mental health acceptance on this campus.

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Table 1

Personal Factors Involves in Seeking Treatment: Response Frequencies

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Stigma surrounding mental health	4	13	6	16	15	11	4
Fear of friends and/or peers finding out	10	14	7	9	11	14	4
Fear of judgement from professors and teaching assistants	10	18	10	16	5	8	2
Fear of being treated differently	3	12	8	13	12	15	6
Perception of gender roles	9	17	5	19	9	6	3
Worry over disappointing family	5	11	11	11	26	21	18
Fear of being perceived as weak	1	14	11	14	25	26	12
Lack of access to treatment options	17	23	11	19	15	12	6
Obstacles from family in seeking care	16	30	8	22	13	10	4
Refusal to acknowledge a problem	11	19	6	21	26	14	6
Stigma in cultural community	11	15	11	28	23	10	5
Traumatic experiences in seeking mental health treatment	29	33	6	24	2	4	4
Inappropriate handling of a mental health issue	20	38	6	18	7	10	4
Fear of authority figures	15	30	6	21	19	10	2
Lack of exposure to mental health resources earlier in life	15	21	8	16	21	17	4
Feelings of not being believed when discussing mental health struggles	15	20	10	17	15	15	11
Lack of financial means	15	18	10	19	21	13	7
Fear of acknowledgement of a problem	9	16	7	18	35	11	7
Fear of asking for help	5	10	11	15	36	14	11
Worry that mental health issue will not be resolved	5	18	12	15	23	18	12
Resistance to trying different methods for management and treatment	12	21	10	28	22	7	3
Resistance to seeking help, believing you can handle the situation on your own	8	7	7	10	31	23	17

Table 2

Current Emotions: Response Frequencies

"Right now I feel…"	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Happy	1	5	7	25	35	24	6
Worried/anxious	2	11	8	12	40	23	7
Pleased	1	6	20	31	21	20	3
Angry/hostile	27	32	18	15	8	0	2
Frustrated	12	25	4	19	30	6	7
Depressed/blue	16	25	10	19	20	9	4
Joyful	2	11	10	29	30	18	3
Unhappy	14	23	16	27	14	7	2
Enjoyment/fun	1	12	10	37	22	17	4

Table 3

Availability of Social Support: Response Frequencies

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
There is a special person who is around when I am in need.	1	4	5	13	28	31	21
There is a special person with whom I can share my joys and sorrows.	1	1	2	11	22	34	32
My family really tries to help me.	6	6	5	14	13	33	26
I get the emotional help and support I need from my family.	7	10	8	14	23	15	26
I have a special person who is a real source of comfort to me.	1	1	2	14	20	33	32
My friends really try to help me	4	0	6	16	29	28	20
I can count on my friends when things go wrong.	2	2	7	20	27	28	17
I can talk about my problems with my family.	13	9	10	12	20	23	16
I have friends with whom I can share my joys and sorrows.	1	4	3	11	21	40	23
There is a special person in my life who cares about my feelings.	1	1	6	12	17	34	32
My family is willing to help me make decisions.	5	3	9	10	22	31	23
I can talk about my problems with my friends.	1	4	6	7	37	27	21

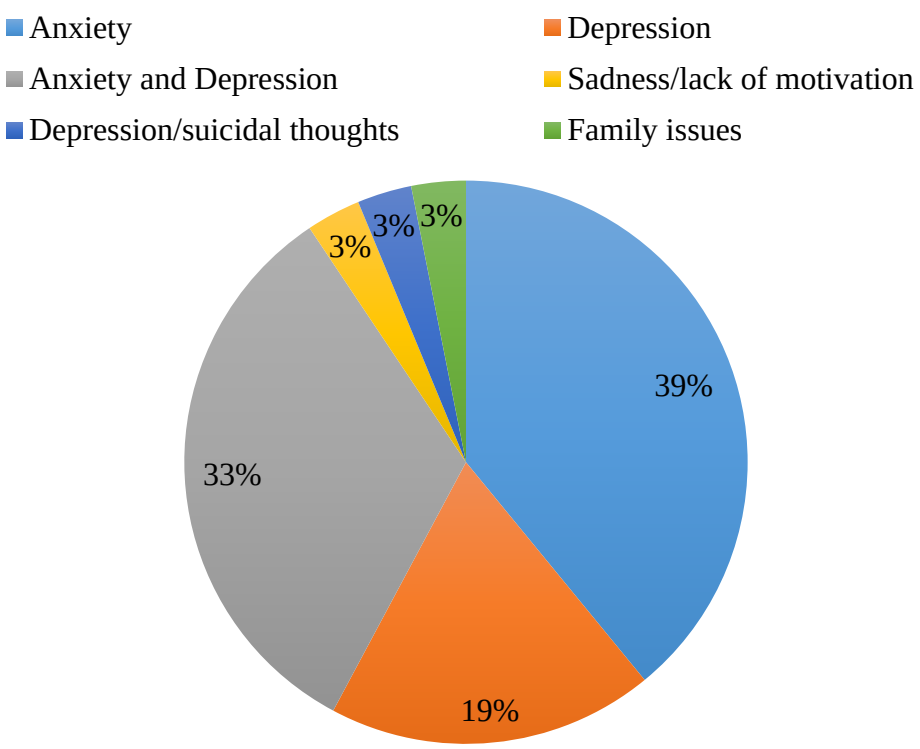

Figure 1. Types of mental health problems experienced at any time in the past.

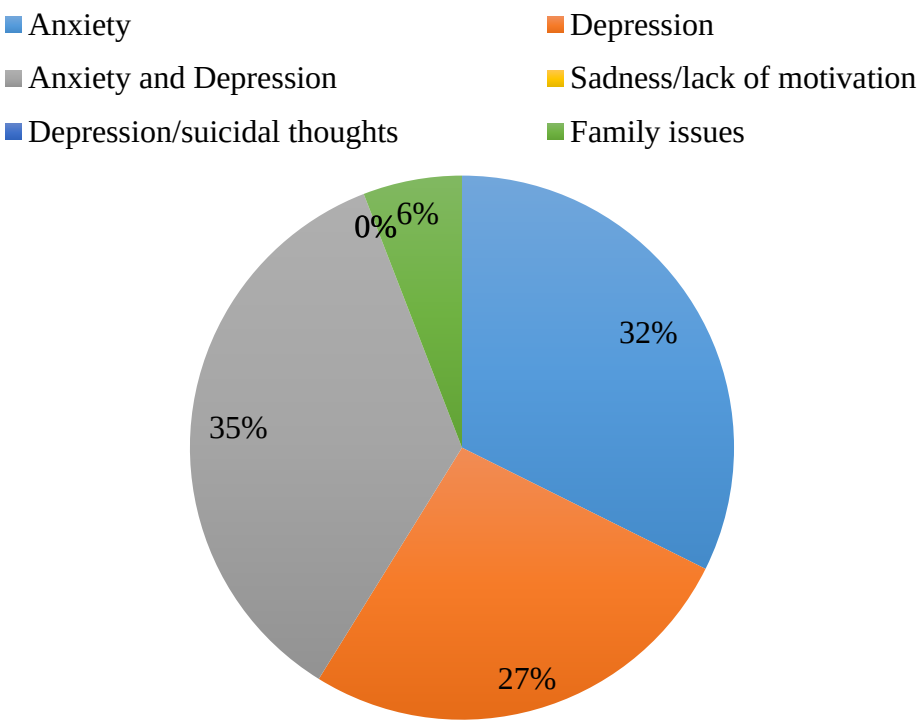

Figure 2. Types of mental health problems experienced currently.

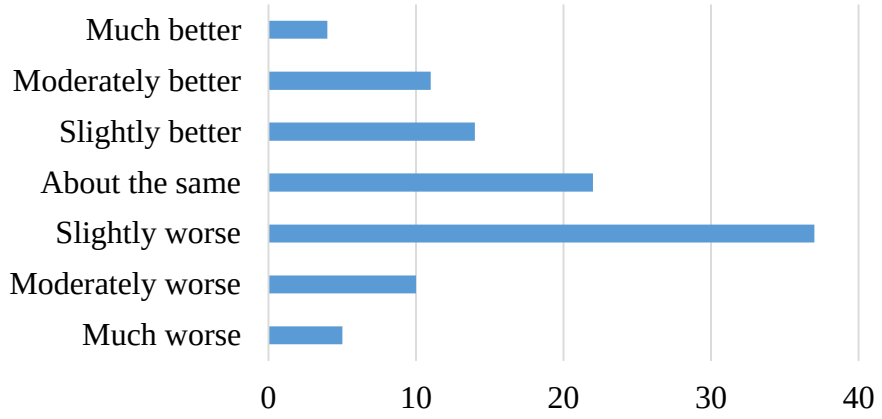

Figure 3. Changes in mental health since entering college: Response frequencies.

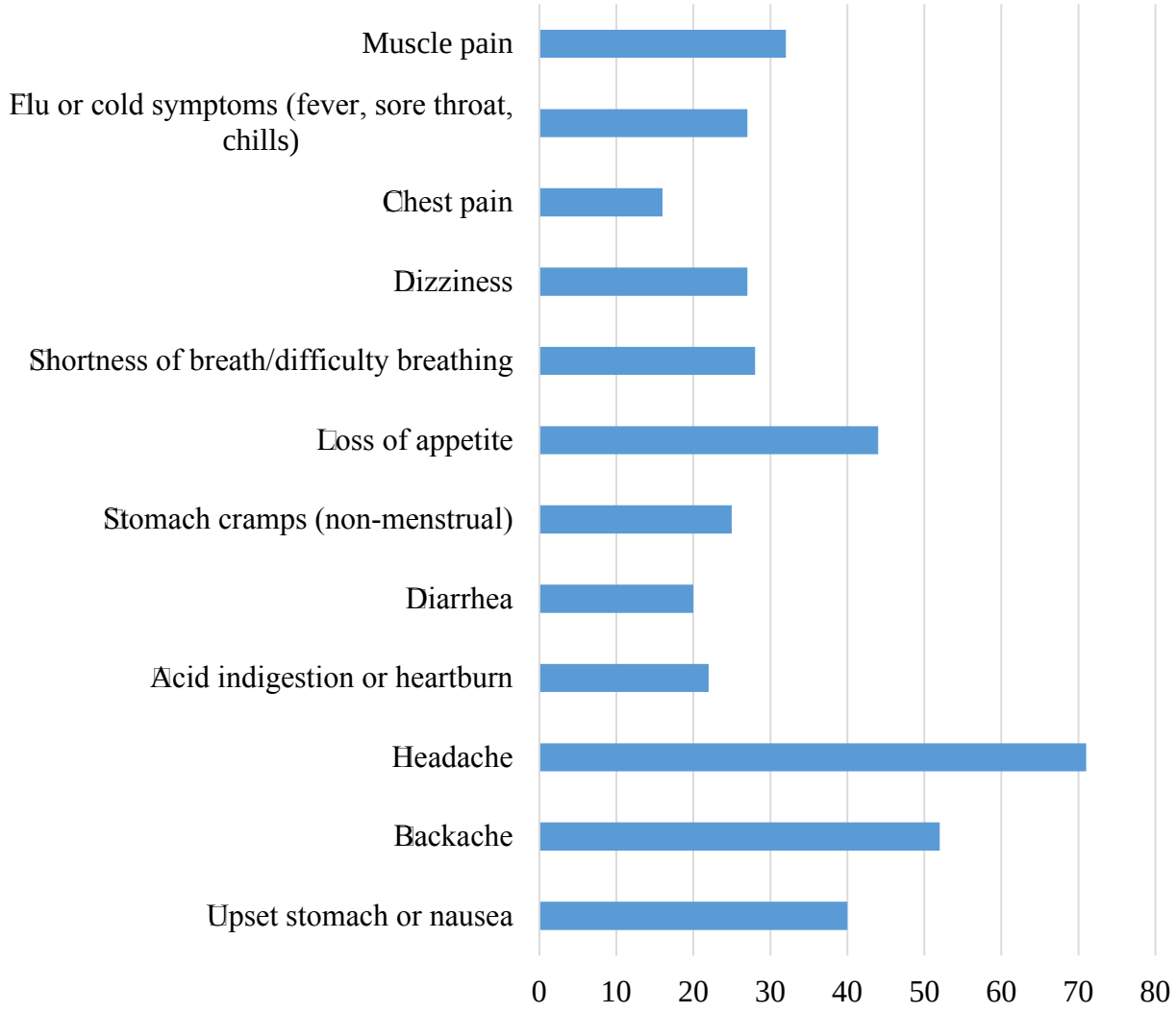

Figure 4. Physical symptoms in the past week: Response frequencies.

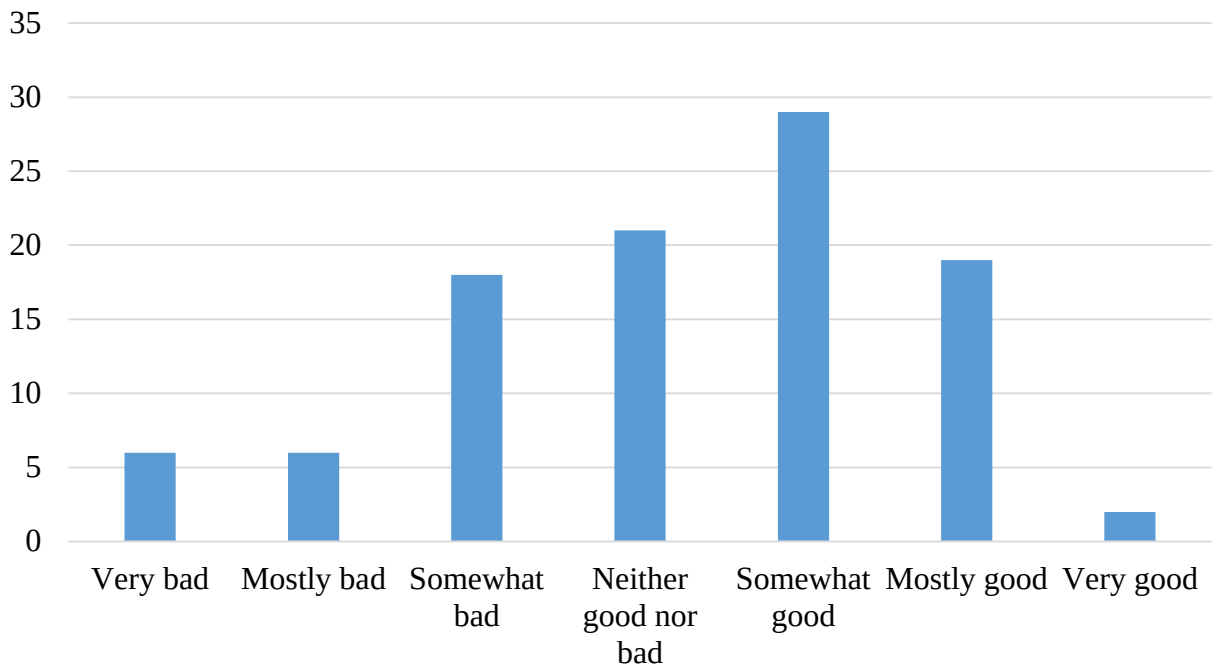

Figure 5. Quality of sleep in the past week.