MENTAL HEALTH HELP-SEEKING BARRIERS FOR COLLEGE STUDENTS: A SYSTEMATIC REVIEW

An Undergraduate Research Scholars Thesis

by

NARIKO NAKACHI

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ABSTRACT

Mental Health Help-seeking Barriers for College Students: A Systematic Review

Nariko Nakachi
Department of Public Health Studies
Texas A&M University

Research Advisor: Dr. Robert Garcia
Department of Health Promotion
Texas A&M University

Students who transition to college will often struggle with maintaining their mental health because of the significant changes occurring in their life. Many campuses across the country provide services to help students manage any mental health issues they encounter. To better help students, researchers need to understand the barriers for students who attempt to seek care. In this study, the current literature was examined to understand the questions being posed, the significant findings, and the gaps. Key terms were used to find articles in the PubMed database. After gathering 1377 articles, 20 ultimately matched the criteria to be a part of the systematic review. Although there were several different research questions, many authors examined how social barriers were affecting students; this included cultural stigma, self-stigma, and social stigma. After analyzing the data, social-stigma as a leading barrier was discussed in more than half of the literature reviewed. The methodologies used in the current literature were primarily quantitative research and had samples not representative of the overall college student population.

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DEDICATION

I would like to thank my mom for encouraging me to pursue public health to help achieve social justice. I would also like to thank my brother Kenji for reading my thesis without any objections.

CHAPTER I

INTRODUCTION

Background and Significance

Mental Health of College Students

Students going to college go through a transition that often means navigating larger course loads, working, and social life on their own for the first time. Traditional college students are also going through developmental changes that affect their ability to effectively cope with stress and anxiety (Chan, Derenne, & Fuchs, 2019). These substantial changes are key factors of the mental health issues that can arise for college students.

Trends on a national level indicate there is an increasing number of college students with mental-health symptoms and behaviors (Duffy, Twenge, & Joiner, 2019). Almost half of the students surveyed through the American College Health Association-National College Health Assessment II (ACHA-NCHA II) in the spring of 2019 reported feeling so depressed that it was difficult to function within the last 12 months, and 66.4% felt overwhelming anxiety within the last 12 months. Risk factors like sleep habits and stress and their effects on poor mental health are understudied in young adults.

Maintaining good mental health is important for students because of how it is related to academic performance; students who report having a mental health problem have higher rates of being dissatisfied with their academic experience (Lipson & Eisenberg, 2018). College students who particularly struggle with suicide ideation report lower GPAs than their peers (De Luca, Franklin, Yueqi, & Johnson, 2016). Although mental health and college student academic

standing is a newer field of study, there are many studies that have proved there is a strong

relationship between mental health and academic achievement in K-12 (NASP, 2012).

Increased Utilization

There has been an increase in college students utilizing mental health services—the rate

of treatment in the United States has increased from 19% to 34% within a 10-year period

(Lipson, Lattie, & Eisenburg, 2018). In 2012, 347 of the 363 counseling center directors

surveyed reported the number of students with psychological issues is becoming a growing

concern; in the same survey 250 out of 355 directors believed the number of students with severe

psychological problems on campus had increased within the past year (Mistler, Reetz,

Krylowicz, & Barr, 2012).

Data at the national level has shown increased utilization of mental health services at

higher education institutions from 2009-2015 (Oswalt et al., 2018). Students have the ability to

utilize free or low-cost services on their campus that young adults who are not students cannot

use. Young adults who are not students are more likely to report not seeking services due to cost

or health insurance than college students (Cadigan, Lee, Larimer, 2018).

Barriers to Help-seeking

Mental illness and using mental health services is highly stigmatized in our society. The

stigmatization of mental illness has been associated with lower mental health help-seeking

behaviors in college student populations (Eisenberg et al., 2009; Cadigan et al., 2018).

Practical barriers to help-seeking include being unable to afford it, not having enough

time, and having difficulty finding appointment times (Eisenberg & Lipson, 2019). It is also

reported that students are not aware of the resources available to them (Eisenberg, Golberstein, &

Gollust, 2007; Cadigan et al. 2018,). Students have reported not wanting to use professional services and instead talk to friends or family (Eisenberg & Lipson, 2019; Cadigan et al., 2018).

Current Interventions

Campuses across the country have taken steps to provide mental health support for students. The interventions can take form in different formats suited for students who may have different preferences. They include group sessions, one-on-one counselor meetings, crisis hotlines, and workshops; these formats are used to teach prevention type programs like psychoeducation, relaxation, and cognitive monitoring and restructuring (Rith-Najarian, Boustani, & Chorpita, 2019). Contact and education-based interventions have been found to significantly affect stigma, attitudes, and intentions for help-seeking (Kosyluk et al., 2016). Current interventions can also take digital form; effective formats have been found through web-based, mobile phone, and offline computer-based platforms (Lattie et al., 2019).

Research Questions and Objectives

The aim of this systematic review is to discover findings related to mental health help-seeking barriers in the literature currently available. Research questions guiding the systematic review include the following:

1. What are the reported barriers shaping college students' mental health help-seeking behaviors?

2. What is the appropriateness of current methodologies used to identify mental health help-seeking barriers in research studies?

This systematic review will be able to assess the trends found in barriers for students trying to seek help for their mental health as well as areas where future research could seek to develop. Finding results consistent between studies will point researchers in the correct direction

when creating interventions specifically meant for college students. The results of this review should also establish a base for future research questions related to help-seeking barriers of college students.

CHAPTER II

METHODS

Data Collection

Search Methodology

PubMed was the chosen database for the search. The search was conducted in October of 2019. Keywords used include terms related to the primary concept of the search. Standard MeSH terms from PubMed were combined with the keywords. The specific keys used for the search are located in Table A1.

Study Selection

The review will focus on papers with undergraduate college students residing in the United States as the target population. Barriers may be different in other countries that may have other cultural and systemic factors. Studies included in the review needed to specifically examine barriers that could prevent students from seeking help for mental health issues. This was to assess and compare the different factors that could prevent students from help-seeking intentions and behaviors. Only barriers to seeking help from professional health care services were considered in the review to be able to compare the help-seeking barrier variables across multiple studies.

Papers with sample inclusion factors that are more specific than undergraduate college students were excluded because they were not representative of most students in the United States. This involved excluding papers that had sample populations made up of only student-athletes, graduate-students, or students in a specific profession or field of study. Papers that did not involve the surveying or interviewing of students in the methods section were excluded to

prevent executive summaries, reviews, systematic reviews, and meta-analysis from being included in the review.

Figure A1 shows the selection process of included and excluded articles. Using the keywords related to the search as well as keywords to be excluded from the search, there were 1,377 titles found. After excluding texts that were not full length, there were 1,253 titles left. The next stage of the review was to remove titles that contained keywords conflicting with search criteria. This stage yielded 29 articles. Then, abstracts and methods were reviewed to confirm the articles fit the parameters of the systematic review. After removing nine articles, 20 studies were ultimately selected to be included in the systematic review.

Data Evaluation

Data Extraction

The 20 included articles were organized into a separate table to identify the general characteristics of each study. Table A2 includes seven study characteristics: author name, article title, publication date, data collection method, sample location, sample inclusion factors, and sample size.

Analysis of Studies

To categorize the aims of the studies, the research questions were tabulated and ranked in a table. Table A3 contains seven categories: social-stigma, self-stigma, cultural identity, accessibility, unaware of resources available, perceived benefit, and perceived need. The methods sections were reviewed to assess methodologies used for collecting and interpreting data.

Study results and discussion sections were thoroughly reviewed to find detected barriers influencing help-seeking behaviors. Noted barriers affecting students were used in the analysis of

studies. The barriers were tabulated and ranked in Table A4; it contained eight categories: self-stigma, social-stigma, negative attitude about help-seeking, cultural identity, accessibility, unaware of resources available, perceived benefit, and perceived need.

CHAPTER III

RESULTS

General Characteristics of Studies

Studies included in the review were published within the years of 2005 and 2019. The studies came from colleges and universities from various geographical areas of the United States. Not all studies indicated the location of the college campus they conducted research at. Racial and ethnic identity were sample inclusion factors in eight studies. There were two studies that chose to identify barriers specifically affecting male students. All the samples contained undergraduate students within the sample, and some chose to include graduate students in their analyses.

Most of the studies examined conducted surveying to gather data. A total of 13 studies used online surveys, and five used paper surveys. Three of the 20 studies used face-to-face interviewing to gather data. One study used both interviews and surveys to gather data. Quantitative analyses were used in 20 of the studies, and three studies used qualitative analyses. There was one study in the review using both types of analyses. Studies utilizing interviews for at least part of the data analyses ranged from 30 to 339 in sample size. Studies using only surveys ranged from 83 to 8,285 in sample size.

Help-seeking Barriers

Table A3 displays the research question topics of studies reviewed. Questions aimed toward barriers associated with social-stigma were included in the majority of the papers. Other psychosocial barriers found in the studies were self-stigma, cultural identity, and acculturation and enculturation. Themes that were unrelated to stigma and attitudes about help-seeking

included accessibility, being unaware of resources available, low perceived benefit, and low perceived need. Table A4 displays the type of significant findings stated in the studies reviewed.

Social-stigma as a Barrier

The studies identifying social-stigma as a barrier were from all over the country, and the barrier was not confined to any specific group of students. Negative attitudes about seeking help in society were the main component of the barrier. Social-stigma was found in all racial and ethnic groups of students, but it presented differently in non-White students. One study noted that social-stigma was related to students who were either Black, Latino, or Asian fearing racial or ethnic discrimination from others (Kim & Lee, 2014; Cheng, Kwan, & Sevig, 2013). There were also Asian students who perceived stigmatization from others because of their internalization of the model minority myth (Kim & Lee, 2014). Previous literature has associated social-stigma with negative attitudes towards help seeking but has not associated it with lower levels of help-seeking (Eisenberg & Lipson, 2019; Golberstein, Eisenberg, & Gollust, 2009).

Social-stigma's ability to influence self-stigma was discovered in multiple studies as well. Chen, Romero, and Karver (2016) found that perceived stigma on campus could negatively affect self-stigma, which ultimately led to low mental health help-seeking intentions. Another study found that those who had only average level self-stigma could accept that others sought out professional care for mental health issues but felt that the general public was less accepting of those seeking help (Wu et al., 2017). It is important to understand the relationship between these two stigmas because they both have a significant impact on help-seeking intentions.

Self-stigma as a Barrier

Intentions of help-seeking were often limited because of self-stigma. There seemed to be some students who minimized their help-seeking needs by telling themselves that seeking

professional care is unnecessary, and they felt that they could handle their issues on their own (Eisenberg et al., 2012; Arria et al., 2011). Besides feeling help-seeking is unnecessary and a general negative self-stigma about help-seeking, there was not much detail into what students thought help-seeking would mean for them. There is literature noting the presence of self-stigma, but not as much linking it to help-seeking behaviors (Eisenberg & Lipson, 2019; Cheng, Wang, McDermott, Kridel, & Rislin, 2017).

Two studies used only male students to identify whether previous results found in the literature would remain true. DeBate, Gatto, and Rafal (2018) found that there was a relationship between the self-stigma of men and lower rates of help-seeking behavior. Heath, Brenner, Vogel, Lannin, and Strass (2017) reported a relationship between masculine norm adherence and higher rates of self-stigma. Specifically focusing on men adds to the discourse on help-seeking barriers because men with mental health problems are less likely to receive treatment than women with mental health problems (Eisenberg, Hunt, Speer, & Zivin, 2011).

Cultural Barriers

Some students felt that there were cultural barriers preventing them from help-seeking. In one study with Latino students, religious belief was the only variable significantly associated with behaviors related to seeking help (Turner & Llamas, 2017). Turner and Llamas (2017) determined that students who had never used mental health services had higher beliefs in spirituality than those who reported help-seeking. Spirituality as a barrier to mental health help-seeking is understudied at the college student level and at the general population level.

Asian students with a higher sense of ethnic identity were more likely to prioritize emotional self-control; the researchers of this study determined that needing to regulation emotions had a mediating role in help-seeking behaviors (Kim & Lee, 2014). There was an

negative association between help-seeking attitudes and Asian students with a higher sense of ethnic identity in two studies (Cheng et al., 2013; Kim & Lee, 2014); however, in another study, Asian students having higher values in terms of acculturation were associated with less positive attitudes to help-seeking (Miller, Yang, Hui, Choi, & Lim, 2011). Cheng et al. (2013) found that in Latino populations with higher sense of ethnic identity had less positive attitudes towards help-seeking, but Black students had lower self-stigma when they had a higher sense of racial identity.

Cultural barriers can affect students who may want to seek help from professional services. The studies did show that ties to different cultural communities can impede help-seeking behaviors, but they did not thoroughly explain how acculturation and enculturation can impact students. Only two studies provided details on how acculturation and enculturation influence help-seeking in students (Miller et al, 2011; Mallinckrodt, Shigeoka, & Suzuki, 2005,; Cha et al., 2019). These concepts should be included when analyzing cultural barriers because they can directly and indirectly affect students of various cultural backgrounds.

Low Perceived Benefit and Need

There were a few specific characteristics that lead students to perceive that seeking help would not be useful to them. Six undocumented students in a sample 30 did not feel seeking-help would be beneficial because providers could not do anything about their immigration status, which was a source of anxiety (Cha, Enriquez, & Ro, 2019). Providers also seemed to be unable to help when students cited distress from academic workload because providers could not do anything to change that (Kim & Zane, 2016). Students may often assume providers are unhelpful because they have expectations for seeking help that are not in line with what providers actually

do for students. This has also been found in other studies examining the perceived treatment effectiveness (Eisenberg, Golberstein, & Gollust, 2007;)

In the studies reviewed, there was a negative association between help-seeking and students believing a counselor wouldn't understand how their cultural identity needs different approaches. One study noted students felt their beliefs should align with their provider, while another study with interviews found that students who felt the staff would not be culturally competent to understand their ethnic issues or cultural significances were less willing to go to counseling (Mallinckrodt et al., 2005; Cha et al., 2019).

Practical Barriers

Despite most of the studies having examined negative stigma and beliefs about mental health services, there were results showing other types of barriers. There were students who did not know where they could seek help; participants did not realize they had access to mental health services located on their campus (Arria et al., 2011; Pace, Silk, Nazione, Fournier, & Collins-Eaglin, 2018). This has also been noted in other studies (Eisenberg, Golberstein, & Gollust, 2007; Eisenberg & Lipson, 2019; Cadigan et al., 2018). Not having the time to seek-help was also identified as a barrier for students. Arria et al. (2011) found that 42% of students surveyed felt they did not have time to go to seek help, and 51% in the study conducted by Eisenberg, Speer, Hunt (2012) felt the same. Only one study cited 33% of students stating they had financial barriers to seeking help (Arria et al., 2011). Despite only one study citing cost as a barrier, it has been associated as a barrier to seeking help in prior studies (Cadigan et al., 2018; Eisenberg & Lipson, 2019;).

Methodologies

The majority of the studies gathered were cross-sectional; a longitudinal study design would help researchers understand whether attitudes about barriers may change over time. A longitudinal study design could also indicate whether or not students' attitudes change before and after having sought out mental health providers.

The studies in the review used data that was self-reported data from students; studies outside of the review are also primarily from self-reported data. They could not control for students who may have different interpretations of questions asked or students who may have felt the need to respond a particular way.

Out of the 20 studies, 12 had only sought out samples from only the institution of the researcher. The limited samples make it difficult to generalize findings to the US college student population. Four of the studies sought out participants by recruiting from psychology classes at the university (Turner & Llamas, 2017; Kim & Zane, 2016; Jennings et al., 2017; Brenner, Vogel, & Lannin, 2017). Students who have had this type of education may have different attitudes about health seeking than the general population of college students who are in other fields of studies.

Discussion

The present systematic review has identified key barriers in help-seeking across several studies. It has shown the current progress in the field, and it has also highlighted areas where more research can take place. As mental health becomes a more mainstream field of research, providers have the opportunity to help students access quality care for mental health issues. Because mental health is a sensitive topic, health professionals need to consider the approaches they take with more diligence when treating students and creating community interventions.

Interventions that address barriers to help-seeking can help facilitate an environment where mental health services are more accessible to a larger number of students (Turetsky & Sanderson, 2017). Research identifying help-seeking barriers has the potential to make interventions more successful.

Young Adults Compared to College Students

Both young adult and college student populations with psychiatric issues have low treatment rates (Blanco, et al., 2009). The literature for young adult mental health help-seeking barriers is very similar compared to literature focusing on those who are pursuing a higher education. Like the studies in this review, literature on young adults also focus on psychological barriers like stigma. In a systematic review conducted by Gulliver, Griffiths, and Christensen (2010), perceived and self-stigmatizing attitudes were the most common themes while reviewing the literature. Other studies examining young adult help-seeking barriers pointed to participants perceiving that their concerns were not serious enough to seek professional help (Vanheusden et al., 2008; Salaheddin & Mason, 2016); this was also found in studies within the present review (Vidourek, King, Nabors, & Merianos, 2014; Wu et al., 2017; Eisenberg, Speer, & Hunt, 2012; Kim & Zane, 2015; Pace et al., 2018).

Future Research

Although there are many different mechanisms preventing students from seeking help for mental health issues, there are recurring themes in the literature that should be considered when practitioners in this field look to implement new interventions and research on their campuses. Throughout the studies, stigma was a significant barrier to professional help-seeking; stigma is a large scale issue that has also been found in larger multi-state and multi-campus studies using college students (Eisenberg, Hunt, & Speer, 2013; Eisenberg & Lipson, 2019). Although there is

research indicating the effects of stigma, there is little research being done to investigate how on-campus interventions are changing stigma.

There were five studies that explicitly indicated social and self-stigma were related to each other (Shea, Wong, Nguyen, & Gonzalez, 2019; Jennings et al., 2017; Wu et al., 2017; Cheng et al., 2013; Arria et al., 2011). Interventions should consider how these concepts can affect one another and how they simultaneously affect a student's ability to seek help. The research would be helpful in future endeavors to create new approaches for college students.

Of the 20 studies used in this systematic review, only three used interviewing in their method of data collection. The three studies using interviewing captured more descriptive data, which is necessary to understand how barriers can affect student behaviors. Mental health and help-seeking behaviors are complex issues needing more than just quantitative analyses. Future research collecting more qualitative information would be helpful to get a better picture of the scope of the barriers students face when seeking help for mental health issues.

The literature did contain studies with samples only including certain ethnic and racial groups to investigate specific barriers for the group. It would be helpful to understand how these groups in different regions of the United States respond to similar surveys. This is important to investigate because students of varying racial, ethnic and socio-economic statuses could have different cultural, social-stigma, and self-stigma barriers affecting their ability to seek help. It is also important to include more studies on how these groups cope with different barriers since most of the articles found in the review focused on those that were psychosocial.

Limitations

There are limitations that should be considered when interpreting the results of this review. Studies only exploring informal help-seeking were not included in the study. Although

professional help is the best way to address mental health issues, students with strong feelings about stigma report using self-help as a way to cope with mental health issues (Levin, Kraft, & Levin, 2018). Students may also utilize informal help-seeking from their peers and family.

The search may have not captured all relevant research because articles were only gathered from the PubMed database. Although the attempt to match keywords to titles yielded more than 1,000 results, terminology used in the search may have been too restrictive. It may not have been able to gather all the articles addressing mental health help-seeking barriers by being too narrow in scope. Having only one person code the articles into the various tables may have also been another limitation.

CHAPTER IV

CONCLUSION

The present review findings suggest college students have to face a variety of barriers when seeking help for mental health issues. Addressing stigma is a key factor in getting students to use mental health services available to them. However, interventions should be tailored to meet the needs of the target population. As mental health service utilization continues to rise, practitioners on college campuses should also acknowledge how the social and physical environment may be different for students with different racial and ethnic identities. Another element for practitioners to consider is assessing the lack of knowledge about mental health services to give students a better understanding of how treatment can be beneficial to them. While the papers did provide information on specific barriers, relationships between barriers and their overall effect on student help-seeking behaviors are important to identify.

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APPENDIX

Table A1. Search Terms Used in the Review in October of 2019.

Search Keys	((College OR university) AND student) AND mental health AND (barrier OR perception OR attitude OR problem) NOT nursing NOT graduate NOT medical NOT children NOT high school
MeSH Terms	universities, mental health, perception, student, attitude

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┌─────────────────────────────┐     ┌─────────────────────────────────┐
│ Potentially relevant titles │     │ Title exclusions (n=1224)       │
│ found in the database search│     │  ▪ Done with a population of     │
│ (n=1377)                    │     │    students outside the U.S.    │
└─────────────────────────────┘     │  ▪ Not focused on mental health │
              │                      │  ▪ Not focused on help-seeking  │
              ▼                      │    barriers                     │
┌─────────────────────────────┐     │  ▪ Used students of only a      │
│ Full text article available │     │    specific field of study      │
│ (n=1253)                    │───▶ │  ▪ Primarily looking at graduate│
└─────────────────────────────┘     │    students                     │
              │                      │  ▪ Primarily looking at students│
              ▼                      │    of specific professions      │
┌─────────────────────────────┐     │  ▪ Primarily looking at         │
│ Articles eligible for text  │     │    collegiate athletes          │
│ screening (n=29)            │     └─────────────────────────────────┘
└─────────────────────────────┘     ┌─────────────────────────────────┐
              │                      │ Abstract and methods exclusions │
              ▼                  ──▶ │ (n=8)                           │
┌─────────────────────────────┐     │  ▪ Research methods do not      │
│ Studies included in the     │     │    include surveying or         │
│ review (n=20)               │     │    interviewing                 │
└─────────────────────────────┘     │  ▪ Methods for data gathering   │
                                     │    include systematic review or │
                                     │    meta-analysis                │
                                     │  ▪ Not focused on professional  │
                                     │    mental health services       │
                                     │    help-seeking barriers        │
                                     │  ▪ Exclusion criteria that was  │
                                     │    not caught in the prior round│
                                     └─────────────────────────────────┘
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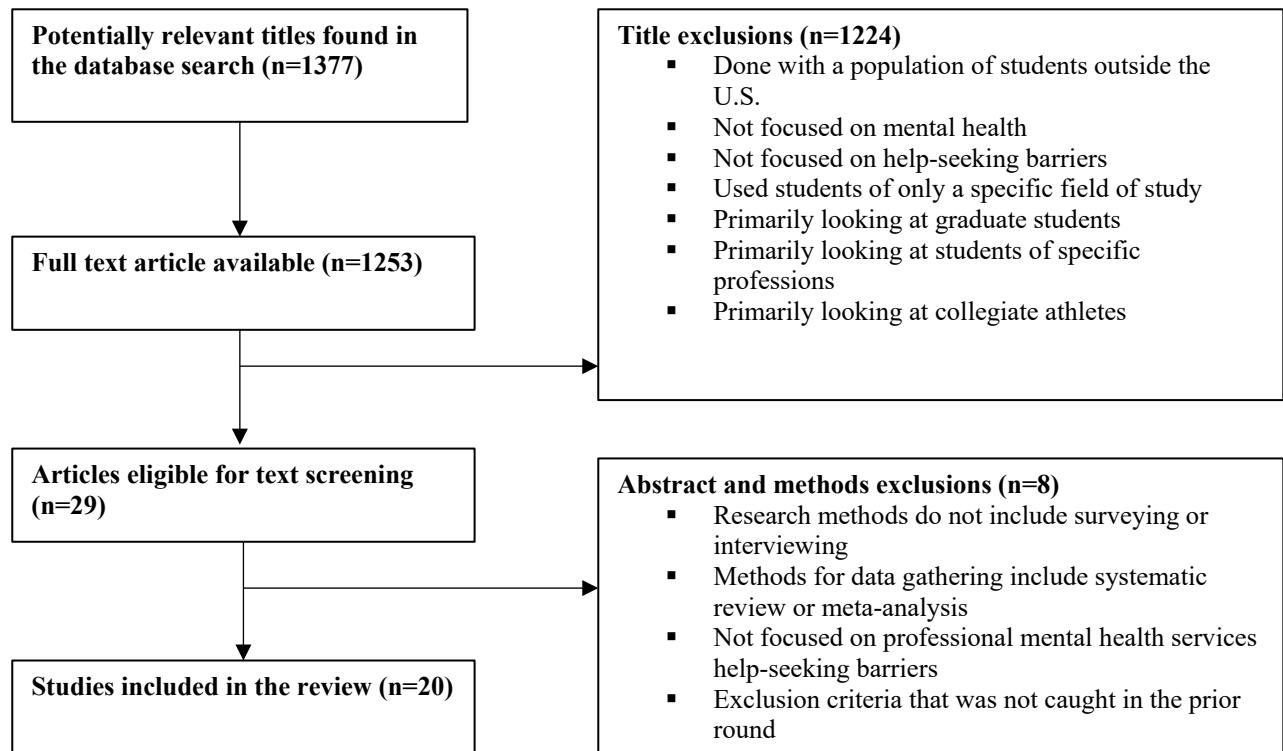
Figure A1. Study Selection Process.

Table A2. Characteristics of Studies Reviews.

Author	Article Title	Date	Data Collection Method	Sample Location	Sample Inclusion Factors	Sample Size
Arria AM, Winick ER, Garnier-Dykstra LM, Vincent KB, Caldeira KM, Wilcox HC, O'Grady KE	Help seeking and mental health service utilization among college students with a history of suicide ideation	2011	Interview	University of Maryland	Students with history of suicidal ideation	158
Cha BS, Enriquez LE, Ro A	Beyond access: Psychosocial barriers to undocumented students' use of mental health services	2019	Interview	University of California system	Undocumented Latinx and Asian students	30
Chen JI, Romero GD, Karver MS	The relationship of perceived campus culture to mental health help-seeking intentions	2016	Online survey	Southeastern university		212
Cheng HL, Kwan KL, Sevig T	Racial and ethnic minority college students' stigma associated with seeking psychological help: Examining psychocultural correlates	2013	Online survey	Large midwestern public university		609
DeBate RD, Gatto A, Rafal G	The effects of stigma on determinants of mental health help-seeking behaviors among male college students: An application of the Information-Motivation-Behavioral Skills Model	2018	Online survey	Large university in the southern US	Male students	1,242
Eisenberg D, Speer N, Hunt JB	Attitudes and beliefs about treatment among college students with untreated mental health problems	2012	Online survey	26 colleges nationally		2350
Garriott PO, Raque-Bogdan TL, Yalango K, Ziemer KS, Utley J	Intentions to seek counseling in first-generation and continuing-generation college students	2017	Online survey	7 4-year universities around the US		610
Heath PJ, Brenner RE, Vogel DL, Lannin DG, Strass HA	Masculinity and barriers to seeking counseling: The buffering role of self-compassion	2017	Online survey	Large midwestern university	Male students	284
Jennings KS, Goguen KN, Britt TW, Jeffirs SM, Wilkes JR, Brady AR, Pittman RA, DiMuzio DJ	The role of personality traits and barriers to mental health treatment seeking among college students	2017	Online survey	Southeastern university		261
Kim JE, Zane N	Help-seeking intentions among Asian American and White American students in psychological distress: Application of the health belief model	2016	Online survey	West coast school	White and Asian students	656

Table A2. Characteristics of Studies Reviews (Continued).

Author	Article Title	Date	Data Collection Method	Sample Location	Sample Inclusion Factors	Sample Size
Kim PY, Lee D	Internalized model minority myth, Asian values, and help-seeking attitudes among Asian American students	2014	Online survey	Private 4-year university in northwest US	Asian students	106
Mallinckrodt B, Shigeoka S, Suzuki LA	Asian and Pacific Island American students' acculturation and etiology beliefs about typical counseling presenting problems	2005	Paper survey	Large public university in northeast US	Asian students	93
Miller MJ1, Yang M, Hui K, Choi NY, Lim RH	Acculturation, enculturation, and Asian American college students' mental health and attitudes toward seeking professional psychological help	2011	Online survey	Large mid-Atlantic university	Asian students	296
Pace K, Silk K, Nazione S, Fournier L, Collins-Eaglin J	Promoting mental health help-seeking behavior among first-year college students	2018	Interview + paper survey		First-year students	339
Shea M, Wong YJ, Nguyen KK, Gonzalez PD	College students' barriers to seeking mental health counseling: Scale development and psychometric evaluation	2019	Online survey	West coast and midwestern universities		1,049
Stewart G, Kamata A, Miles R, Grandoit E, Mandelbaum F, Quinn C, Rabin L	Predicting mental health help seeking orientations among diverse undergraduates: An ordinal logistic regression analysis	2019	Paper survey	Large urban public university system		1,272
Tummala-Narra P, Li Z, Chang J, Yang EJ, Jiang J, Sagherian M, Phan J, Alfonso A	Developmental and contextual correlates of mental health and help-seeking among Asian American college students	2018	Online survey	Different geographical areas and college sizes	Asian students	465
Turner EA, Llamas JD	The role of therapy fears, ethnic identity, and spirituality on access to mental health treatment among Latino college students	2017	Paper survey	University in central Texas	Latino students	83
Vidourek RA, King KA, Nabors LA, Merianos AL	Students' benefits and barriers to mental health help-seeking	2014	Paper survey	Midwestern university		682
Wu IHC, Bathje GJ, Kalibatseva Z, Sung D, Leong FTL, Collins-Eaglin J	Stigma, mental health, and counseling service use: A person-centered approach to mental health stigma profiles	2017	Online survey	11 US colleges		8,285

Table A3. Research Question Themes.

Barrier	Number of Studies
Social-stigma	12
Self-stigma	10
Cultural Identity	10
Perceived Benefit	5
Unaware of Resources Available	3
Accessibility	2
Perceived Need	2

Table A4. Significant Findings Themes.

Barrier	Number of Studies
Self-stigma	9
Social-stigma	8
Negative Attitude	6
Cultural Identity	6
Perceived Need	5
Accessibility	4
Unaware of Resources Available	3
Perceived Benefit	3
Provider Issues	2