Prevention and Treatment of Anxiety, Depression, and Suicidal Thoughts and Behaviors Among College Students

SAMHSA
Substance Abuse and Mental Health
Services Administration

Prevention and Treatment of Anxiety, Depression, and Suicidal Thoughts and Behaviors Among College Students

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I

Abstract

The increase in prevalence of mental health concerns on college campuses over the last few years is viewed as a serious mental health crisis requiring immediate action. Additionally, the number of students enrolling in college with preexisting mental health conditions is rising. Finally, college students are at the prime age for the onset of many symptoms of mental illnesses.

The guide presents five evidence-based programs and practices that address the prevention and treatment of common mental health concerns: gatekeeper trainings, mindfulness-based stress reduction, acceptance and commitment therapy, cognitive behavioral therapy, and dialectical behavior therapy.

The guide provides considerations and strategies for federal and regional partners from the Departments of Education and Justice, policymakers (federal, state, and local), college administrators and educators, counseling/medical centers on college campuses and within college communities, and families.

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II

Evidence-Based Resource Guide Series Overview

The Substance Abuse and Mental Health Services Administration (SAMHSA) and, specifically, its National Mental Health and Substance Use Policy Laboratory, is pleased to fulfill the charge of the 21st Century Cures Act and disseminate information on evidence-based practices and service delivery models to prevent substance misuse and help individuals with substance use disorder (SUD), serious mental illness (SMI), and serious emotional disturbance (SED) get the treatment and support they need.

Treatment and recovery for individuals with SUD, SMI, and SED can vary. These individuals may live in different parts of the country and face a variety of socioeconomic factors that help or hinder recovery. These factors introduce complexities to evaluating the effectiveness of services, treatments, and supports.

Despite these complexities, substantial evidence is available to inform the types of services, treatments, and supports that reduce substance use, lessen the symptoms of mental illness, and improve quality of life. Communities are eager to take advantage of what has been learned to help people in need.

The Evidence-Based Resource Guide Series is a comprehensive and modular set of resources intended to support implementation of interventions that improve health outcomes for individuals at risk for, experiencing, or recovering from substance use and mental disorders. A priority for SAMHSA is encouraging the implementation of programs and practices that address mental health concerns of college students. This guide will review the literature and the science, examine best practices, determine key components of these best practices, identify challenges and strategies for implementation, and discuss evaluation of implemented programs and practices.

An expert panel made up of federal, state, and non-governmental participants provided input for each guide in this resource guide series. The panel included scientists, researchers, providers, administrators from provider and community organizations, federal and state policymakers, and people with lived experience. They provided input based on their knowledge of healthcare systems, implementation strategies, evidence-based practices, provision of services, and policies that foster change.

Research shows that implementing new programs or practices requires a comprehensive, multi-pronged approach. This guide is one piece of an overall strategy to implement and sustain change. Readers are encouraged to review the SAMHSA website for additional tools and technical assistance opportunities.

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Content of the Guide

This guide contains a foreword (FW) and five chapters (1-5). The chapters stand alone and do not need to be read in order. Each chapter is designed to be brief and accessible to healthcare providers, healthcare system administrators, community members, policymakers, and others working to meet the needs of individuals at risk for, experiencing, or recovering from a substance use or mental disorder. The goals of this guide are to review the literature on treating college students' mental health concerns, distill the research into recommendations for practice, and provide examples of how practitioners can use these practices.

FOCUS OF THE GUIDE

The increase in prevalence of mental health concerns on college campuses over the last few years is viewed as a serious mental health crisis requiring immediate action.[1] Additionally, the number of students enrolling in college with preexisting mental health conditions is rising.[2] Finally, college students are at a prime age for the onset of many symptoms of mental illnesses.[3]

While college students seek help for a range of mental health concerns, the Center for Collegiate Mental Health (2020) reports that anxiety and depression are the top reasons college students seek counseling and there is a clear and consistent increase in these symptoms in recent years.[4] Suicidal thoughts and behaviors among college students are also on the rise.[2]

While mental health services on college campuses can be accessed by non-traditional and graduate students, this guide focuses on educating college personnel, clinicians, and practitioners about strategies for screening and treating anxiety, depression, and suicidal thoughts and behaviors among transition-aged college students (18-24 years). The guide presents five evidence-based programs and practices that address the prevention and treatment of these common mental health concerns.

The guide supports SAMHSA's Strategic Plan Objective 3.4, "Support the identification and adoption of evidence-based practices, programs, and policies that prevent substance use, increase provision of substance use disorder treatment, and enable individuals to achieve long-term recovery."

The target audience for this guide includes federal and regional partners from the Departments of Education and Justice, policymakers (federal, state, and local), college administrators and educators, counseling/medical centers on college campuses and within college communities, and families of students.

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The framework below provides an overview of this guide, which addresses the prevention and treatment of anxiety, depression, and suicidal thoughts and behaviors among college students. The review of these treatments in Chapter 2 of the guide includes specific outcomes, practitioner types, and delivery settings for each practice.

GUIDE FRAMEWORK

SCOPE

MENTAL HEALTH CONCERNS ADDRESSED IN THIS GUIDE:
Anxiety, Depression, and Suicidal Thoughts and Behaviors

POPULATION OF FOCUS:
College Students

STAGES OF THE CARE CONTINUUM:
Prevention and Treatment

TREATMENTS

Gatekeeper Trainings
Mindfulness-Based Stress Reduction (MBSR)
Acceptance and Commitment Therapy (A&CT)
Cognitive Behavioral Therapy (CBT)
Dialectical Behavior Therapy (DBT)

EVIDENCE REVIEW

OUTCOMES ACHIEVED:
- Increase in recognition of warning signs of suicide exhibited by at-risk students
- Increase in ability to communicate effectively with at-risk students
- Decrease in symptoms of anxiety
- Decrease in symptoms of depression

PRACTITIONERS:
- Mental Health Clinicians

MODES OF DELIVERY:
- In-person (Individual)
- In-person (Groups)
- Telephone
- Web-based or computerized

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Issue Brief

This chapter presents an overview of some of the most common mental health concerns among college students, such as anxiety and depression, focusing on their prevalence, consequences, and related factors.

Transitioning to adulthood is a time of significant change, particularly for college students. While many young adults take on more responsibilities and navigate new relationships, those residing on college campuses must also adapt to living away from home while facing greater academic demands. Surrounded by roommates and peers, college students experience social pressures constantly. They may also have increased access to alcohol and drugs, which can lead to substance misuse. These circumstances may adversely affect a college student's emotional and mental well-being.

Mental health concerns, such as anxiety and depression, are common among college students.[3] While 50 percent of mental illnesses first occur by adolescence, another 25 percent emerge by the mid-20s, overlapping with typical college years.[5] Some students start college with existing mental health conditions. Regardless of when mental health symptoms first appear, college students must navigate these challenges while being away from their network of relationships and support systems. They also have to receive care in an adult-serving behavioral health system, possibly for the first time in their lives.

Student mental health concerns are associated with decreased academic performance, and higher dropout rates in college.[6] Studies have shown that depression and suicidal thoughts and behaviors are associated with lower grade point average.[7-9]

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Anxiety refers to anticipation of a future real or perceived threat and is often associated with "muscle tension and vigilance in preparation for future danger and cautious or avoidant behaviors."[10] Symptoms, which are typically persistent, lasting 6 months or more, may also include excessive worry, palpitations, restlessness, being easily fatigued, trembling, feelings of choking, sweating, chest pain, nausea, dizziness, paresthesias (numbness or tingling sensations), problems concentrating, irritability, and sleep disturbances. Anxiety disorders differ from normal feelings of fear or anxiety, in being excessive or persistent. Anxiety disorders include generalized anxiety disorder, panic disorder, specific phobias, agoraphobia, social anxiety disorder (social phobia), selective mutism, substance/medication-induced anxiety disorder, and separation anxiety disorder. Many of the anxiety disorders develop in childhood and tend to persist if not treated.

Depression or depressive disorders, with the classic condition being major depressive disorder, is a mood disorder characterized by the presence of "sad, empty or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function."[10] A major depressive episode is different from normal sadness and grief, including bereavement, Major depressive disorder symptoms can vary from mild to moderate to severe and can include:

- Depressed mood (e.g., feeling sad, empty, or hopeless) most of the day, nearly every day
- Markedly diminished interest or pleasure in activities once enjoyed (anhedonia)
- Changes in appetite; significant weight loss or gain unrelated to dieting
- Trouble sleeping (insomnia) or sleeping too much (hypersomnia)
- Loss of energy or increased fatigue, nearly every day
- Increase in purposeless physical activity (e.g., inability to sit still, pacing, handwringing) or slowed movements or speech (these actions must be severe enough to be observable by others)
- Feeling worthless or guilty, nearly every day
- Difficulty thinking, concentrating, or making decisions, nearly every day
- Recurrent thoughts of death, recurrent suicidal ideation, or suicide attempt

Suicide is death caused by an intentional self-directed injurious act, carried out with the intent of causing one's own death. Common warning signs of suicidal behavior include:[11]

- Talking about wanting to die, great guilt or shame, and being a burden to others
- Feeling empty, hopeless, trapped or having no reason to live, extremely sad, more anxious, agitated or full of rage, and unbearable emotional or physical pain
- Behaviors such as making a plan or researching ways to die, withdrawing from friends, saying goodbye, giving away important possessions or making a will, taking dangerous risks like driving extremely fast, displaying extreme mood swings, eating or sleeping more or less, and increasing drug or alcohol use.
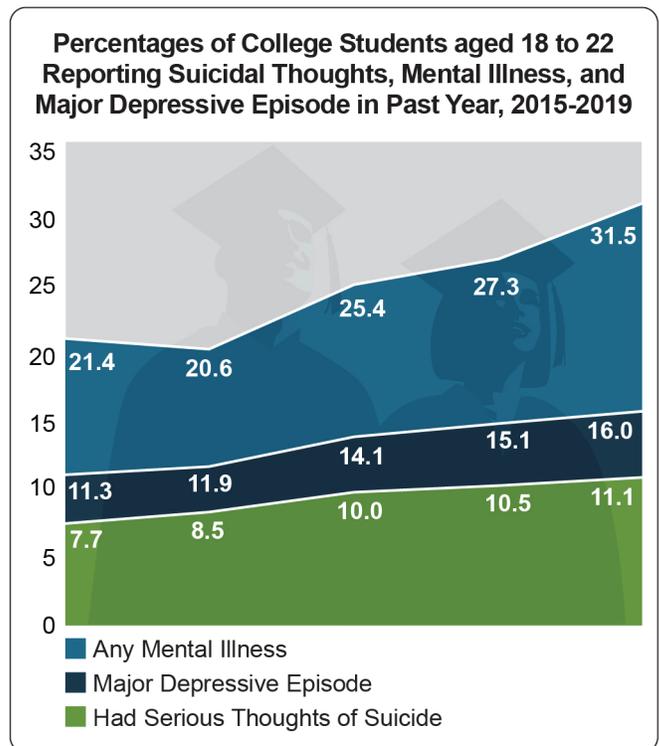
A **suicide attempt** is a non-fatal, self-directed, and potentially injurious behavior with intent to die. **Suicidal ideation** refers to thinking about or planning suicide. The thoughts lie on a continuum of severity from a wish to die with no method, plan, intent, or behavior, to active suicidal ideation with intent and a specific plan. **Self-harm**, also known as self-directed violence, is behavior that is deliberately self-directed and results in injury or the potential for injury. The term encompasses both suicidal and non-suicidal self-injury (NSSI), and self-harm with unclear intent.

Sources: American Psychiatric Association and Centers for Disease Control and Prevention, National Center for Injury Prevention and Control

Prevalence of Mental Health Concerns in College Students

In 2018, about 69 percent of individuals aged 16 to 24 who graduated from high school or completed a GED or other high school equivalency credential were engaged in post-high school education. Of those seeking further education, 25 percent were enrolled in a 2-year college and 44 percent in a 4-year college.[12]

In recent years, there has been an increase in reported symptoms of mental illness in this population.[2] Mental health diagnoses rose from 22 to 36 percent among college student respondents between 2007 and 2017, with particular increases in the prevalence of depression and suicidal ideation.[13] According to the National College Health Assessment, about 60 percent of respondents felt overwhelming anxiety, while 40 percent experienced depression so severe that they had difficulty functioning.[14]
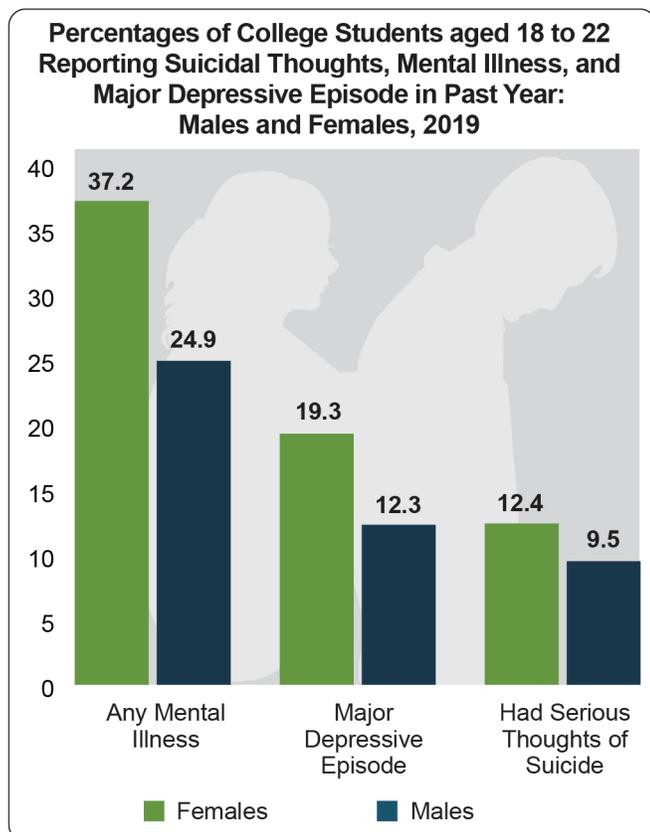
Percentages of College Students aged 18 to 22 Reporting Suicidal Thoughts, Mental Illness, and Major Depressive Episode in Past Year: Males and Females, 2019

Source: Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data

Note that no significance testing was conducted. Differences in prevalence between males and females may not be statistically significant

Percentages of College Students aged 18 to 22 Reporting Suicidal Thoughts, Mental Illness, and Major Depressive Episode in Past Year, 2015-2019

Source: Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data

Note that formal trend analyses for the presented period were not conducted.

National Institute of Mental Health (NIMH) defines any mental illness (AMI) as a mental, behavioral, or emotional disorder. AMI can vary in impact, ranging from no impairment to mild, moderate, and even severe impairment (e.g., individuals with serious mental illness). Serious mental illness (SMI) is defined as a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities.

Additionally, in a 2019 study of over 400 college presidents, 8 out of 10 presidents reported the mental health of their students as a rising priority when compared to the three previous years.[15]

The 2019 National Survey on Drug Use and Health (NSDUH) found that 31.5 percent of full-time college students aged 18 to 22 reported any mental illness in the past year, and 7.5 percent reported serious mental illness (SMI) in the past year. In addition, 16.0 percent of full-time college students reported at least one major depressive episode (MDE) in the past year, and 11.1 percent of students had serious thoughts of suicide in the past year.[16] These rates have been increasing steadily over the past decade.[2]

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Gender Differences in Prevalence

Research has found gender differences in the prevalence of mental health concerns among college students. Female students typically exhibit more depressive symptoms and also report higher levels of stress than their male counterparts.[17-20] Additionally, females have reported more self-cutting behaviors than males.[21] Studies have also noted that men often find acknowledging mental health concerns stigmatizing, which, in turn, deters them from disclosing those concerns and seeking help.[22-24]

Sexual Orientation and Gender Identity Differences in Prevalence

Multiple studies have been conducted to explore the differences in college student mental health experiences based on sexual orientation. Compared with their heterosexual counterparts, individuals who identify as gay, lesbian, and bisexual report receiving more counseling or mental health services on college campus.[25] Also, bisexual students are more likely to report mental health diagnoses and suicidal thoughts and behaviors compared to heterosexual and gay/lesbian students.[26]

Gender minority students (individuals who have a gender identity or expression that differs from their assigned sex at birth or does not fit within the male-female classification) are found to experience increased risk of depression, suicidal thoughts, and suicidal attempts, when compared with their cisgender (people whose gender identity matches their sex assigned at birth), lesbian, gay, bisexual, queer, and questioning counterparts.[27-28] Additionally, young people who report undergoing sexual orientation or gender identity conversion also report higher rates of suicide attempts than those who do not.[29] A study using a national dataset of college students found that transgender students are twice as likely to experience anxiety, depression, and panic attacks as cisgender female students.[30]

Race Differences in Prevalence

Studies show that a higher proportion of students who identify as multiracial or Asian/Pacific Islander report feelings of hopelessness, depression, and anger, when compared to their White counterparts.[33] On the annual Healthy Minds web-based survey of 2015, Latino/a, Asian, and multiracial students exhibited more severe depressive symptoms than White students, as measured by scores on the Patient

> ### Potential Sources for Increase in Mental Health Concerns Among College Students in Recent Years[3, 31]
>
> 1. Dramatic transition that can bring about adjustment difficulty
> 2. Intense pressure to succeed academically
> 3. Increased levels of anxiety and depression in society
> 4. Rapid evolution of technology and information overload, including social media
> 5. Economic and financial pressure
> 6. Food insecurity
> 7. Stigma against mental illness inhibiting help-seeking; lack of adequate mental health education
> 8. College counseling centers experiencing overload of demand and dearth of skilled staff
>
> The COVID-19 pandemic, beginning in March 2020, has added to the stress experienced by college students. Among other concerns, students associated the pandemic with fear and worry about their own health and that of their loved ones, difficulty in concentrating, disruptions to sleeping patterns, decreased social interactions due to physical distancing, and increased concerns about academic performance.[32]

Health Questionnaire-9 (PHQ-9).[34] Research also suggests that Black, Latino/a, and Asian students are individually more likely to consider or attempt suicide, compared to White students.[35] However, other studies find no racial difference in rates of lifetime suicide attempts.[36]

Racial differences also exist regarding access to mental health services for college students. For example, Asian American students are less likely than their Black, Latino/a, or White counterparts to have previously sought mental health services. They are also less likely to know anyone close to them who has used such services.[37]

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Studies have shown that BIPOC students (black, indigenous, and other people of color) utilize mental health services less frequently than White students and are more likely to have unmet mental health needs.[38] One reason for this disparity appears to be related to self-perception; studies have shown that youth of color are less likely to perceive a need for mental health services.[39] This difference in perception may be due to the perceived social stigma associated with seeking mental health treatment.

Similarly, differences exist in barriers that students face in accessing mental health services. Finances are greater barriers for Black and Latina/o students, while White students report a lack of time; all racial/ethnic minority students report cultural sensitivity issues (e.g., sensitivity of the mental health provider) as significant barriers.[40]

Socioeconomic Differences in Prevalence

Research has demonstrated association between adolescents' and young adults' socioeconomic status (SES) and mental illness.[45-47] Studies have particularly indicated a close relationship between low SES and high levels of stress, anxiety, and depression in college students.[48]

Intersectionality

The college population is incredibly diverse, composed of students from a number of backgrounds and identities. A framework of intersectionality asserts that those who belong to more than one historically disenfranchised group, such as those defined by sex, race, religion, gender identity, socioeconomic status, (dis)ability, or sexual orientation, may experience mutually reinforcing effects of disparity and/or systemic inequality.[41] College students with multiple marginalized identities may face particular challenges that may cause or exacerbate mental health symptoms and make seeking and receiving treatment more difficult. Previous studies provide evidence that individuals experiencing discrimination are more likely to use alcohol and other substances as a coping strategy.[42-44] As practitioners and decision-makers on campus address mental health concerns on campus, they should take issues of campus climate and identity into consideration throughout the continuum of care.

Data from the annual Healthy Minds web-based survey of 2015 showed that college students experiencing financial distress and a lack of student medical insurance had higher levels of anxiety, depression, and suicidal ideation.[49] A national study of college students' mental health found that 7 out of 10 students in the sample were stressed because of their personal finances, with 60 percent worrying about having adequate funds to pay for college tuition.[50] The financial burden of student loans is also associated with college students' experience of stress, anxiety, and depression.[51] Additionally, the rising cost of college increases students' anxiety and the pressures on them to succeed academically.[52]

International Student Status Differences in Prevalence

There were more than 1 million international students enrolled at U.S. colleges during the 2019-20 academic year, representing 5.5 percent of all college students.[53] Research suggests that international students seek help for their mental health concerns at rates significantly lower than their domestic student counterparts (32.0 percent vs. 49.8 percent for any formal treatment; 14.9 percent vs. 32.9 percent for pharmaceutical treatment).[54] International students also are more likely to report perceived public stigma and personal stigma towards formal help-seeking.[54] These students may face unique stressors such as language barriers, lack of familiarity with the U.S. education system, cultural misunderstandings or miscommunication, and cultural isolation.[55]

Co-Occurring and Related Conditions

This guide focuses primarily on depression, anxiety, and suicidal thoughts and behaviors, the most common mental disorders among college students. However, there is a wide array of other individual and environmental factors which may be related to or co-occurring with depression, anxiety, and/or suicidal ideation. Practitioners must consider these factors when engaging and treating the college student population.

Regardless of the specific intervention, understanding the potential clinical challenges patients could present and the environmental context producing such challenges will help practitioners to select and implement the most appropriate treatment practices to meet the needs of their patients. This guide presents some of these related issues, including how they may be intertwined with or exacerbate the symptoms of depression, anxiety, and suicidal thoughts and behaviors that college students experience.

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Eating Disorders

Eating disorders, such as anorexia nervosa, bulimia nervosa, and binge-eating disorder, are serious and often fatal illnesses. These illnesses are characterized by severe disturbances in people's eating behaviors and related thoughts and emotions. Preoccupation with food, body weight, and shape are common symptoms of eating disorders.

Eating disorders are a significant problem among college students, with an increase in prevalence in the last couple of decades.[56] These disorders in college students increase the risk of negative physical health and psychological consequences, including substance use and depression.[57] Studies have shown that eating disorders often co-occur with anxiety disorders and depression.[58-59]

Alcohol and Substance Use

Alcohol misuse and substance use disorders (SUD) are prevalent on college campuses. According to 2019 NSDUH data, one in eight college students aged 18-22 met the criteria for SUD in the previous year and 8.2 percent of full-time college students met criteria for heavy alcohol use (defined as binge drinking on 5 or more days in the past 30 days).[16] SUD may co-occur with mental illness; adults 18 or older who reported past-year any mental illness (AMI) were more likely than those without mental illness to have used illicit drugs in the past year (38.8 percent versus 16.6 percent). Among adults 18 years of age or older in 2019 3.8 percent (or 9.5 million people) had both AMI and SUD.[60]

The prevalence rates of heavy alcohol use differ by race and ethnicity. Prevalence was highest among Whites (11.8 percent), followed by Asian (4 percent), Hispanics (3.9 percent), and Blacks (2.1 percent).[61] Heavy alcohol use is also less prevalent among those who identify as lesbian, gay, and bisexual (LGB) compared to those who do not (7.6 percent vs. 8.2 percent).[61]

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The prevalence rates of SUDs also differ by race and ethnicity. Prevalence was highest among Whites (14.0 percent), followed by Hispanics (12.1 percent), Blacks (11.3 percent), and Asians (8.2 percent).[61] SUD is more prevalent among those who identify as LGB compared to those who do not (18.3 percent vs. 11.9 percent).[61]

Studies have shown that major depressive disorder is a significant predictor of heavy episodic drinking, and substance use is a risk factor for self-injurious behavior and suicidal ideation.[62-64] A review of studies on suicide completion in the general population found that those with opioid use disorder, intravenous drug use, and polydrug use were 14 to 17 times more likely to die of suicide.[65]

Non-suicidal Self-injury

Non-suicidal self-injury (NSSI) is defined as behaviors in which an individual intentionally harms their body without explicit suicidal intent and for reasons that are not socially sanctioned. NSSI typically involves behaviors such as cutting, burning, scratching, and self-battery.[66] Although there is no single clear set of risk factors for NSSI, research has shown that it is often related to depressive and anxiety symptoms in college students.[67] NSSI also increases the chances of suicidal ideation, plans, and attempts.[68] Gender differences have been found in the reasons male and female college students report for their NSSI behaviors: females were more likely to self-injure in hopes that their distress would be recognized, while males report anger and intoxication as contributing factors.[69]

Other Serious Mental Illness

While depression, anxiety, and suicidal thoughts and behaviors are of great concern and common among college students, the college years are also the developmental period when symptoms of SMI first appear. Approximately 75 percent of people with SMI, such as schizophrenia and bipolar disorder, experience symptoms by the age of 25.[70]

According to recent data the prevalence of SMI appears to be highest for young adults aged 18 to 25. However, compared to other adults, this age group appears to be the least likely to receive treatment for their SMI.[16] Early detection and treatment of these disorders are particularly important.

Mental Health and Social Support

One factor that has been shown to promote mental health of college students and act as a buffer against stress and anxiety is social support.[71] Social support, the physical and emotional assistance provided by family and friends, is associated with emotional well-being.[72-73] Both the quantity of social relationships (structural support) and quality of social relationships (functional support) are considered important aspects in determining the positive effects of social support on student mental health.[74]

Yet college students with SMI may face challenges receiving treatment in college. Thirty-four percent of campus counseling centers do not have psychiatrists on staff to assess and treat SMI that requires medication, and only 15 percent of centers have full-time, in-house psychiatric services available.[4] Remaining in college may also be difficult for these students; studies show that adults living with schizophrenia or bipolar disorder are much more likely to have dropped out of college than the general population.[75]

Sexual Assault and Violence

Sexual assault—any nonconsensual sexual act proscribed by federal, tribal, or state law, including when the victim lacks capacity to consent—is a common occurrence on college campuses. More than one in five college women will experience at least one incident of sexual assault during their time at college, and 6.8 percent of undergraduate men have experienced nonconsensual sexual contact.[76] Also, lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) students experience higher rates of sexual assault while in college, as compared to their heterosexual, cisgender peers.[76]

Survivors of sexual assault may experience mental health crises or ongoing mental health symptoms as a result. Research has shown that sexual assault is a significant predictor of anxiety, depression, and suicidal thoughts and behaviors.[77-78] In addition, those with mental illnesses may also be at greater risk for sexual assault. A study found that people with post-traumatic stress disorder (PTSD)[a] and depression had a greater risk for sexual assault.[79]

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[a]   According to the American Psychiatric Association, *PTSD* is a psychiatric disorder that may occur in people who have experienced or witnessed a traumatic event, such as a natural disaster, serious accident, terrorist act, war/combat, or rape or who have been threatened with death, sexual violence, or serious injury.

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Treatment of Mental Health Concerns on College Campuses

The transition from mental health services for children and adolescents to those for adults is rarely seamless, and transition-aged individuals (individuals who are between 18-24 years) often fall through the cracks during this period. These individuals may not be provided with appropriate support or referrals or may be referred to adult systems with which they are unfamiliar and that are ill-equipped to meet their current needs.[80] Continuity of care can be even more compromised when a student moves to a new location during the transition from youth to adult, as often happens when starting college.

Higher education institutions have the responsibility to provide students with access to mental health services, but they may find it difficult to keep up with the growing demand. The Center for Collegiate Mental Health reported that between Fall 2009 and Spring 2015, counseling center utilization increased by an average of 30 to 40 percent, while college enrollment increased by only 5 percent.[4] In a 2019 survey, 87.3 percent of counseling center directors reported an increased need for services compared to the previous year.[81]

For students who seek counseling, wait times for an appointment can span multiple days, if not weeks.[81] While evidence suggests that as many as 35 percent of college students screen positive for a mental illness, only about 13 percent, on average, actually utilize their campus counseling centers.[4, 81, b] Although some students may choose to forego treatment due to social stigma or personal reasons, others may face difficulty in accessing services.

Counseling centers working at capacity are not always able to serve every student who seeks treatment, may provide shorter or less frequent sessions than desired, or may not offer the types of services needed (e.g., pharmacological services). More than half of counseling centers manage patient demand by referring students off-campus or by triaging them based on perceived urgency.[81] Moreover, higher caseloads per counselor are associated with lower rates of improvement for patients experiencing common mental health concerns.[4] Thus, an overwhelmed counseling center may be less effective in helping students.

Among college students who reported receiving mental health services in the past 12 months (multiple responses possible):[14]

- 55% received services on campus at the health center or counseling center
- 22% received services from a local provider near campus
- 48% received services from a provider in their hometown

Among providers/clinicians at on-campus counseling centers:[4]

- 71% are professional staff members
- 10% are pre-doctoral interns
- 5% are trainees at the doctoral level
- 5% are trainees at the master's level
- 5% are at the post-doctoral level

Among clinicians at on-campus counseling centers (highest degree reported):[4]

- 34% have a degree in counseling psychology
- 33% have a degree in clinical psychology
- 13% have a degree in social work
- 6% have a degree in counselor education
- 3% have a degree in psychiatry

In light of these challenges, higher education institutions need to create a network of supports beyond the typical counseling center. Colleges can leverage their unique environment to identify, prevent, and treat mental health concerns. A multi-pronged holistic approach that includes all levels of the care continuum is required to address student mental health by the college leadership.[88]

Some colleges train members in their community to become "gatekeepers," which are people equipped to respond when they recognize early warning signs of suicide.[89] Gatekeepers interact with students daily and can include anyone with a campus presence, faculty, staff, or even other students.

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b   The Center for Collegiate Mental Health (CCMH) data include a sample of counseling centers across the country. Other studies have indicated that the percentage using campus counseling services varies widely.[66]

Administrative Policies of Higher Education Institutions

Various mental health and education-focused organizations have position statements and resources related to administrative policies of higher education institutions to support students' mental health. Some of these statements are summarized below.

Mental Health America's position statement, _College and University Response to Mental Health Crises_,[82] recommends:

- Colleges and universities provide a variety of mental health resources to proactively reach students where they are.
- College and university policies prevent students with mental health conditions from experiencing stigma and discrimination.
- Colleges and universities develop protocols to respond fairly and effectively to students in crisis.
- Policies limit liability for colleges and universities to encourage proper protocols.[82]

Active Minds' _position statement_ promotes leave of absence and return from absence policies for mental health concerns at higher education institutions that are in keeping with the provisions of the Americans with Disabilities Act of 1990 (ADA), Section 504 of the Rehabilitation Act of 1973, and best practices recommended by the Judge David L. Bazelon Center for Mental Health Law, a national legal-advocacy organization that advocates for the civil rights, full inclusion and equality of adults and children with mental disabilities.[83]

The American Psychiatric Association's resource on _College Mental Health and Confidentiality_ prepares practitioners to provide clinical care within the framework of relevant law.[84]

Campus Pride, a national nonprofit organization for student leaders and campus groups working to create a safer college environment for LGBTQ students, has developed _Best Practices to Support Transgender and Other Gender-Nonconforming Students_, which include gender-inclusive bathrooms and housing policies and preferred name change policies.[85]

The National Association of Student Personnel Administrators' (NASPA) resource _Strategies for Addressing Mental Health Support on Campus_ includes ways to effectively support the mental health needs of today's students, such as a robust infrastructure, equity centered policies and procedures, and strong mechanisms for communication, assessment, and improvement.[86]

The Jed Foundation's resource _Student Mental Health and the Law_ provides campus professionals with a summary of laws and professional guidelines, as well as related good practice recommendations, to support well-informed decision making around students at risk.[87]

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Economic Benefits for Institutions

Colleges' investments in student mental health can not only improve students' individual outcomes (overall health and well-being, academics, etc.), but also produce a number of economic benefits from an institutional perspective. Improving students' mental health is likely to reduce dropout, and this increased retention should result in increased tuition revenues for institutions, as well as higher earnings for students who otherwise would not have graduated.[90] These outcomes may further an institution's academic standing and/or improve its reputation, producing further economic benefits.
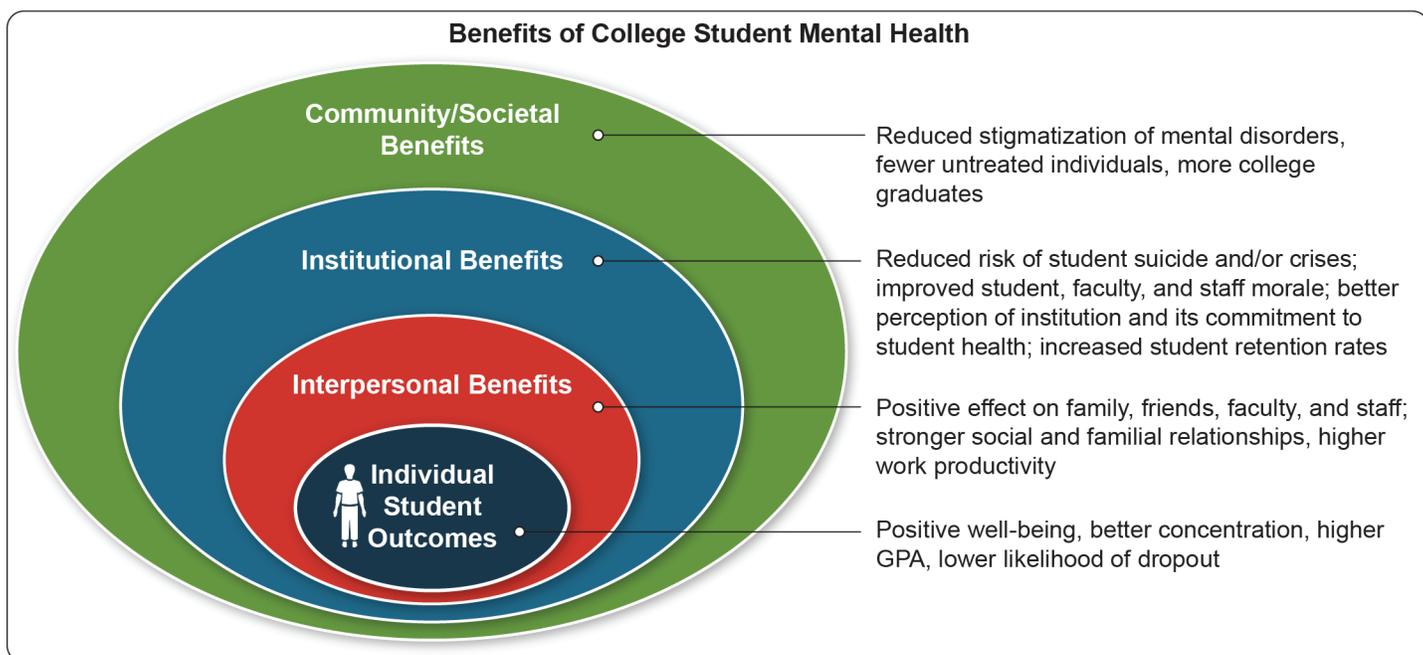
Beyond specific academic institutions, the economic benefits of improved campus mental health services could be enormous; one study by the RAND Corporation found that each dollar spent on prevention and early intervention programs by the California Mental Health Services Administration (CalMHSA) produced $6.49 in net societal benefits.[91]

Institutions interested in learning more about the potential economic benefits of student mental health investments may wish to explore the Healthy Minds Network's Return on Investment (ROI) tool.

Another strategy that has become more common in recent years is the use of embedded counselors.[92] This model increases access to mental health services by placing counselors in specific locations across the university, such as residence halls, athletic offices, and professional schools.

Whatever the method of expanding their mental health care system, colleges need to continue to identify opportunities to support the mental well-being of their students. Intervening early, when symptoms are identified, makes for better long-term outcomes for the student over their lifetime, and not just during their college years.[93] Additionally, healthy college students not only gain positive college experiences, but these positive outcomes are also associated with long-term individual, interpersonal, institutional, and community benefits, as depicted in the graphic below.

Benefits of College Student Mental Health

Community/Societal Benefits — Reduced stigmatization of mental disorders, fewer untreated individuals, more college graduates

Institutional Benefits — Reduced risk of student suicide and/or crises; improved student, faculty, and staff morale; better perception of institution and its commitment to student health; increased student retention rates

Interpersonal Benefits — Positive effect on family, friends, faculty, and staff; stronger social and familial relationships, higher work productivity

Individual Student Outcomes — Positive well-being, better concentration, higher GPA, lower likelihood of dropout

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What Research Tells Us

Effectiveness of Mental Health Interventions in Colleges

Mental disorders frequently begin during young adulthood (ages 18–25 years), when young people are typically in college.[1] Concerns about mental health among college students are exacerbated by factors such as lack of screening for and diagnosis of mental disorders, symptom denial, and inaccessible, inadequate, and/or inappropriate treatment. Evidence-based interventions for prevention, early identification and diagnosis, and treatment programs on college campuses can help reduce these concerns. The campus-based mental health programs presented in this chapter are grouped into two categories:

1. **Campus-wide interventions focused on prevention and early intervention**: The primary purpose of campus-wide interventions is to facilitate and/or increase access to mental health services. These interventions use a public health approach, and help campus staff, faculty, and students recognize students in distress and refer them to individual interventions and therapy available on campus.

Campus-wide practices include, but are not limited to, universal screenings, self-help apps, gatekeeper trainings, peer-to-peer interventions[a], bystander interventions, and stigma-reduction campaigns.[b] These practices are designed to facilitate access to or improve attitudes toward help-seeking behavior and/or referrals. The practices are intended to be preventative and are typically appropriate for use by all adults who interact with students on a college campus. In addition, universal screenings can capture the mental health needs of all students on campus and help identify those who are at risk for behavioral health challenges.

2. **Clinical interventions**: Clinical interventions are administered by licensed mental health professionals (or graduate interns), typically through the college counseling center. They focus on treatment of specific mental health diagnoses and can be administered in a group or individual format. In the past, these interventions were entirely in-person, but in recent years, colleges have expanded the scope of these practices to include additional clinical services through telehealth, sometimes using external partnerships.

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[a]   Peer-based interventions are defined as a method of teaching or facilitating health promotion that asks people to share specific health messages with members of their own community.

[b]   Stigma-reduction campaigns aim to create awareness around and help remove stereotypes associated with mental health issues.

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This chapter highlights one campus-wide and four clinical interventions to prevent or treat mental health problems among college students:

Campus-wide/public health interventions

1. Gatekeeper trainings

Clinical interventions

1. Mindfulness-Based Stress Reduction (MBSR)
2. Acceptance and Commitment Therapy (A&CT)
3. Cognitive Behavioral Therapy (CBT)
4. Dialectical Behavior Therapy (DBT)

The chapter also provides an overview of the interventions, including a discussion of the typical settings, demographic groups, intensity and duration, and outcomes attributed to receipt of the intervention. Each program or practice description includes a rating based on its evidence of impact on mental health outcomes, which include:

- Increased understanding and recognition of mental health concerns, especially suicide-related behaviors, and improved understanding of and access to services (campus-wide interventions)
- Improvements in mental health or reductions in severity of symptoms associated with anxiety and depression and in suicidal thoughts and ideation (clinical interventions)

Intervention Selection

Interventions had to meet the following criteria to be considered for inclusion in this guide:

- Be clearly defined and replicable
- Address mental health concerns of college students
- Be currently in use
- Demonstrate evidence of effectiveness
- Have accessible implementation resources and fidelity (the degree to which a program delivers a practice as intended) supports

Evidence Review and Rating

Authors completed a comprehensive review of published research for each selected intervention, to determine its strength as an evidence-based practice. Eligible research studies were required to:

- Employ a randomized or quasi-experimental design, or
- Be a single sample pre-post design or an epidemiological study with a strong counterfactual (i.e., a study that analyzes what would have happened in the absence of the intervention), and
- Have been conducted in the United States since 2000

Descriptive studies, implementation studies, and meta-analyses were not included in the review, but were documented, to understand the interventions better and identify implementation supports for the practices.

Each eligible study was reviewed for evidence of measurable impact on mental health outcomes. In addition, trained reviewers checked each study to ensure rigorous methodology, asking questions such as:

- Are experimental and comparison groups statistically equivalent, with the only difference being that participants in the experimental group received the intervention and those in the comparison group received treatment as usual or no or minimal intervention?
- Was baseline equivalence established between the treatment and comparison groups?
- Were missing data addressed appropriately?
- Were outcome measures reliable, valid, and collected consistently from all participants?

Using these criteria, each study was assessed and given a rating of low, moderate, or high. Only randomized controlled trials, quasi-experimental designs, and epidemiological studies with a strong comparison were eligible to receive a high or moderate rating.

After all studies for a practice were assessed and rated, the practice was placed into one of the three categories (strong evidence, moderate evidence, and emerging evidence) based on its causal evidence level. See Appendix 2 for more information about the evidence review process.

CAUSAL EVIDENCE LEVELS

(S) Strong Evidence

Causal impact demonstrated by at least *two* randomized controlled trials, quasi-experimental designs, or epidemiological studies with a high or moderate rating.

(M) Moderate Evidence

Causal impact demonstrated by at least *one* randomized controlled trial, quasi-experimental design, or epidemiological study with a high or moderate rating.

(E) Emerging Evidence

No study received a high or a moderate rating. The practice may have been evaluated with less rigorous studies (e.g., pre-post designs) that demonstrate an association between the practice and positive outcomes, but additional studies are needed to establish causal impact.
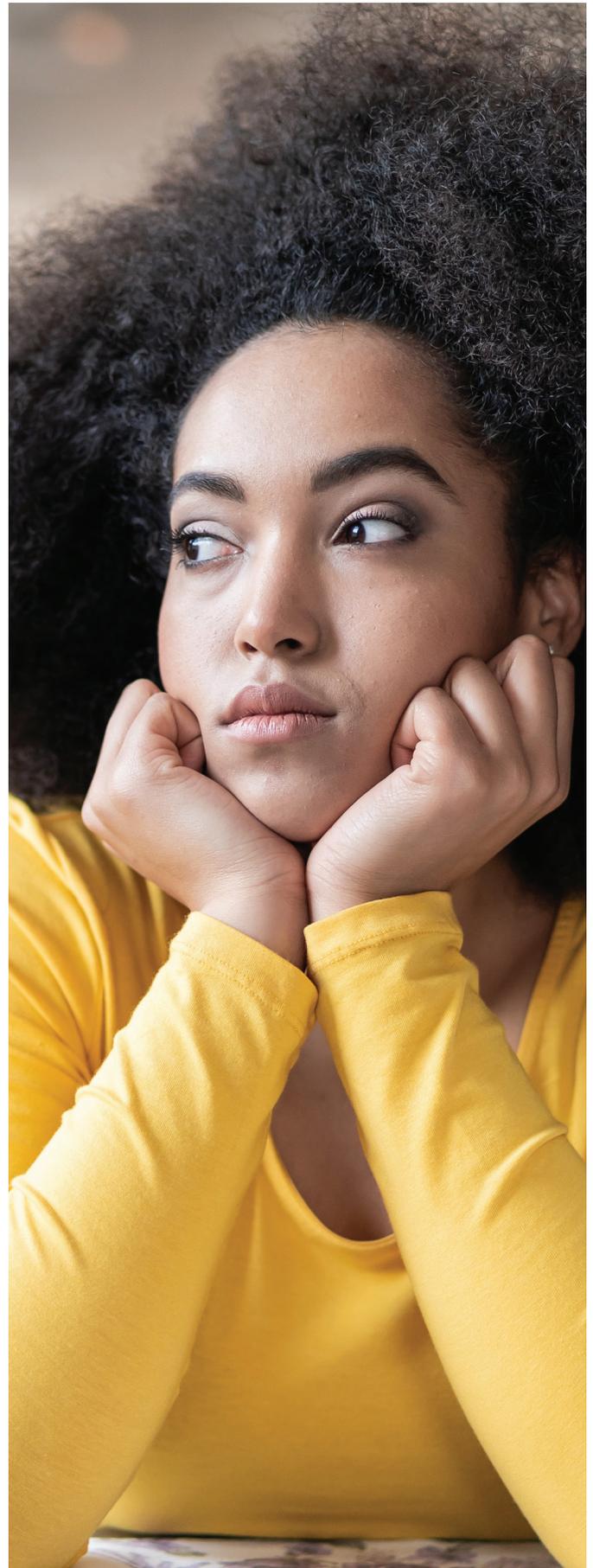
Research Opportunity

This evidence review identified research studies for five prevention/treatment practices. Although the body of research is growing, practitioners continue to face the challenge of limited evidence, particularly from well-designed randomized controlled trials (RCTs), when selecting programs to address mental health concerns of college students. There are other interventions for mental health, but they have not been studied specifically for college students. The field would benefit from more research on impact of these interventions on college students.

Campus-Wide/Public Health Interventions Associated With Mental Health of College Students

Gatekeeper Trainings
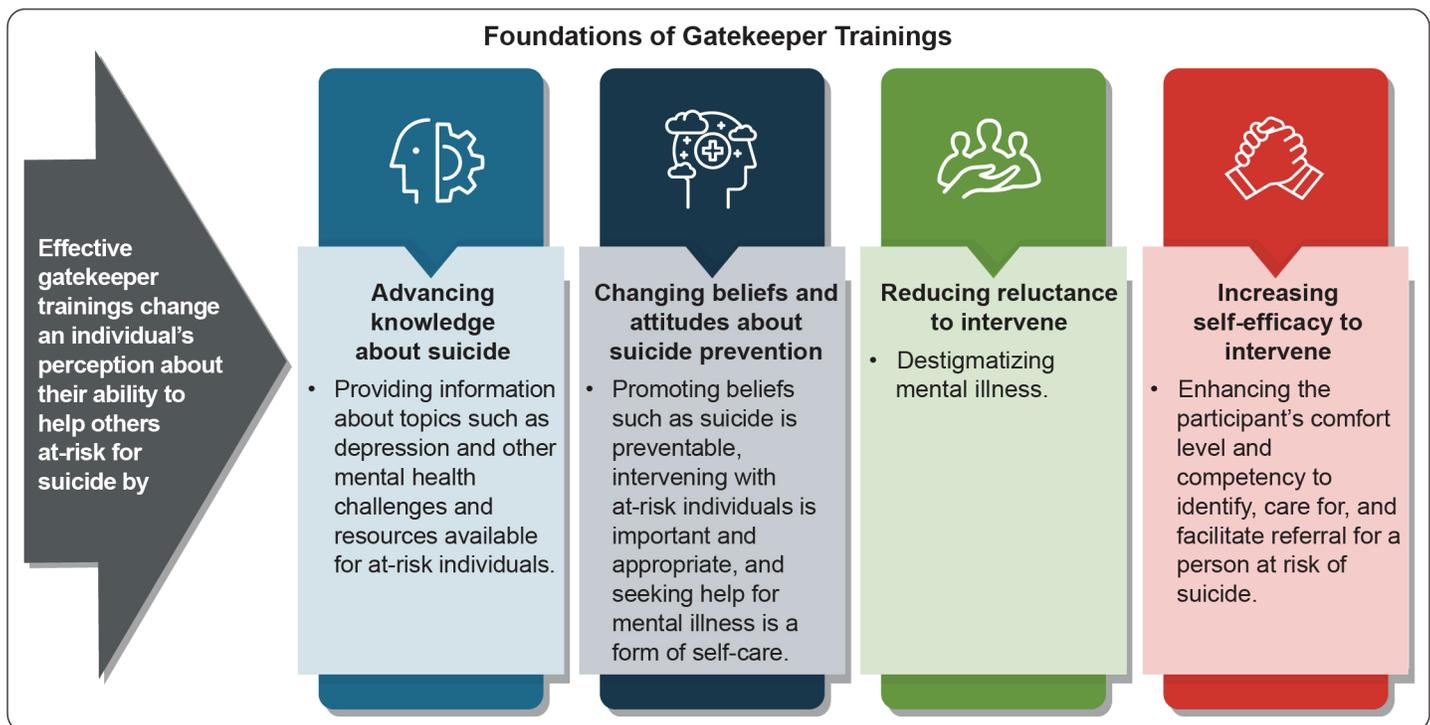
🔍 **Strong Evidence**

Overview

Gatekeeper trainings are suicide prevention programs that train participants to recognize warning signs of suicide risk in individuals they interact with and to help them get access to trained mental health services they need in the moment of crisis. Students on college campuses at risk for suicide do not always consult healthcare professionals in the critical period before they harm themselves. During that time period, friends, family, fellow students, and staff can help vulnerable students if they are trained to recognize and respond to suicide risk.[3]

Although various gatekeeper trainings are available for use with college populations, they all have similar foundational principles and objectives, with the common aim of helping adults:

1. Recognize warning signs of psychological distress and suicide exhibited by at-risk students
2. Communicate effectively with these students and encourage them to seek further help

The trainings may differ in their format and delivery methods.

Twenty-one studies of gatekeeper training were considered eligible for this evidence review. Of these studies, one was rated high and four were rated moderate. Sixteen were rated low because they were pre-post design studies or the reviewers identified weaknesses in their study designs. The five high and moderate studies led to an overall rating of "strong support for causal evidence," and included all the gatekeeper trainings mentioned on the next page.

Foundations of Gatekeeper Trainings

Effective gatekeeper trainings change an individual's perception about their ability to help others at-risk for suicide by

Advancing knowledge about suicide
- Providing information about topics such as depression and other mental health challenges and resources available for at-risk individuals.

Changing beliefs and attitudes about suicide prevention
- Promoting beliefs such as suicide is preventable, intervening with at-risk individuals is important and appropriate, and seeking help for mental illness is a form of self-care.

Reducing reluctance to intervene
- Destigmatizing mental illness.

Increasing self-efficacy to intervene
- Enhancing the participant's comfort level and competency to identify, care for, and facilitate referral for a person at risk of suicide.

Source: Burnetter, C., Ramchand, R., & Ayer, L. (2015). Gatekeeper Training for Suicide Prevention. *Rand Health Quarterly, 5*, 1-16.

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Type of Gatekeeper Training	Training Description
Question. Persuade. Refer. (QPR)	Developed by Paul Quinnett, QPR is a specialized training for individuals (students), organizations (large number of college students or staff), and professionals (counselors/therapists on college campuses). The intervention is delivered through online or in-person sessions, each one to two hours long.
Applied Suicide Intervention Skills Training (ASIST)	Developed by LivingWorks, ASIST offers multiple programs focused on crisis resolution with varying time commitments from a one-hour training to a more in-depth, half-day training, to an intensive two-day, 16-hour training.
Campus Connect	Developed by the Syracuse University Counseling Center especially for college campuses, Campus Connect is a two and a half hour, experientially based training that involves participants in multiple interactive exercises.
Kognito	Developed by health simulation company Kognito, this training consists of two online training sessions involving interactive roleplay simulations specifically for college populations; one 45-minute training is designed for faculty, staff, and administrators and another 40-minute training is intended for college students and student leaders.
Mental Health First Aid (MHFA)	Developed by Betty Kitchener and Anthony Jorm from Australia, MHFA USA offers separate courses for adults and youth, each single day sessions running from five to seven hours.

Population of Focus

Although studies of gatekeeper trainings often include students, staff, and faculty on college campuses, the typical participant group included in the studies in this review consisted of resident assistants (RAs).[4-7] RAs, often students themselves, live and work within the residence halls on college and university campuses and, thus, share living space with college students. This proximity gives the RAs more opportunity than most other campus staff to identify stress and anxiety in students.[8] Only one review study included campus staff.[4] Although participants across all five studies were predominantly females and predominantly White, these trainings can be adapted to meet the needs of ethnic/racial communities, wherein they are used.[9]

Although not applicable to any study included in this review, Kognito trainings do offer a version catering particularly to the needs and experiences of the LGBTQ+ community on a college campus.

Practitioner Types

Although staff in health and behavioral healthcare settings particularly benefit from gatekeeper trainings, any campus community member can get trained and certified in implementing these programs. Most gatekeeper trainings included in this review (QPR, ASIST, Campus Connect, and MHFA) offer train-the-trainer models.

The gatekeeper trainings included in this review were delivered by professionals, trained and certified in those specific trainings.[4, 6] Since the Kognito trainings include self-administered, web-based modules, live trainers were not involved in that study.

Intensity and Duration of Treatment

Most gatekeeper trainings are delivered in a single training event, which varies from one to five hours and includes either in-person or online sessions.[4, 6-7] Kognito trainings are delivered via 40-45-minute pre-recorded, online sessions or simulations. Some gatekeeper trainings require periodical renewals or recertifications.

Outcomes

Studies that contributed to the strong evidence rating of this intervention demonstrated gatekeeper trainings with college students and staff had the following outcomes:

- Decrease in gatekeeper reluctance to intervene[6]
- Increase in participant's likelihood to intervene[6]
- Increase in participant's general self-efficacy[5-7]
- Increase in gatekeeper preparedness[5]
- Increase in participant's knowledge about mental health[7]
- Increase in participant's confidence,[4, 7] comfort, and competence[4] in helping at-risk students

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Clinical Mental Health Interventions for College Students
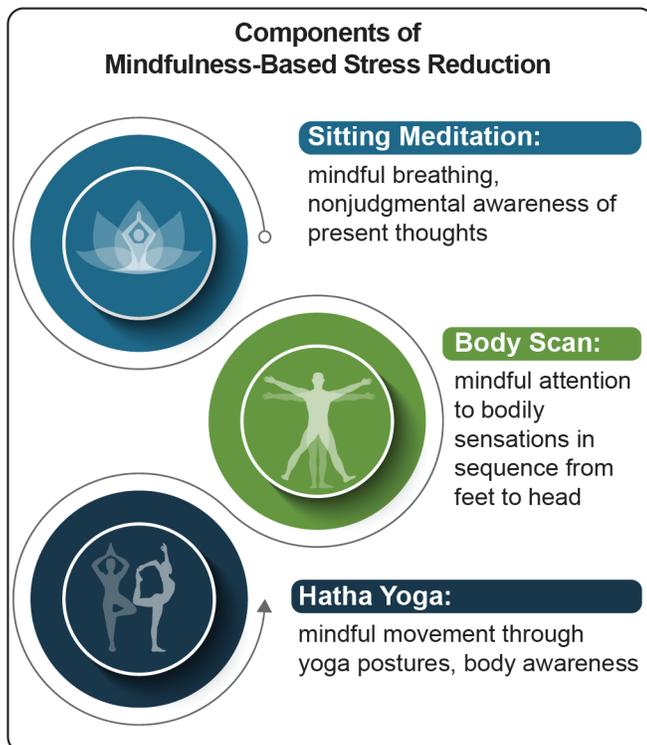
Mindfulness-Based Stress Reduction

🔍 **Strong Evidence**

Overview

Mindfulness-Based Stress Reduction (MBSR) is a program that uses mindfulness meditation to reduce stress and anxiety and manage emotions.

Through the three MBSR activities, individuals become attentive to bodily sensations while practicing nonjudgmental awareness of their thoughts.[10] By incorporating MBSR principles into their daily lives, individuals can manage physical and mental symptoms of illness and difficult emotional situations. This process can reduce anxiety and stress and improve mental health.[10-11]

Five studies of MBSR were eligible for review. Of these studies, one rated high and four rated moderate, giving the intervention an overall rating of "strong support for causal evidence."

Components of Mindfulness-Based Stress Reduction

Sitting Meditation: mindful breathing, nonjudgmental awareness of present thoughts

Body Scan: mindful attention to bodily sensations in sequence from feet to head

Hatha Yoga: mindful movement through yoga postures, body awareness

Source: Sharma, M., & Rush, S. E. (2014). Mindfulness-based stress reduction as a stress management intervention for healthy individuals: A systematic review. *Journal of Evidence-Based Complementary & Alternative Medicine, 19(4)*, 271-286.

Population of Focus

MBSR was originally designed to relieve suffering in patients with stress and pain.[12] It has since been used with a variety of populations in clinical and non-clinical settings, including cancer patients[13] and employees in the workplace.[14]

Studies included in this evidence review focused on the general college student population, as well as students with depressive symptoms[15] or seeking stress reduction.[16]

Participants across the five studies were predominantly female and predominantly White.[15-19]

Practitioner Types

Online and in-person trainings for certification in MBSR, ranging from 8 to 10 weeks, are available at https://www.mindfulleader.org/. Several studies included in this review utilized certified facilitators to deliver the intervention;[17] at least one other study included doctoral-level graduate student therapists.[15] In another study, the professor of a health course delivered MBSR as part of the class curriculum.[18] In yet another study, students practiced MBSR individually via self-help "bibliotherapy," which involves reading through an MBSR workbook on their own and engaging in digital mindfulness exercises.[16]

Intensity and Duration of Treatment

The standard MBSR program consists of interactive online learning environment, eight weeks of live instructor-led sessions, and a daylong retreat after the sixth week. Participants may also complete at-home exercises for individual practice.

Two studies included in this review utilized a brief version of MBSR, comprising only four weekly sessions.[15, 19] Another study allotted 10 weeks for students to complete the bibliotherapy.[1]

Outcomes

Studies that contributed to the strong rating of this intervention demonstrated that MBSR with college students had the following outcomes:

- Decrease in depressive symptoms[15-16]
- Decrease in symptoms of anxiety[16]

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Acceptance and Commitment Therapy

🔍 **Strong Evidence**

Overview

Acceptance and Commitment Therapy (A&CT) aims to increase psychological flexibility. Psychological flexibility is the ability to comprehend current thoughts and emotions and continue or change one's behavior, depending on the situation and one's values.

Eight A&CT studies were eligible for inclusion in this review. Five studies rated high for study design, of which two had statistically significant positive outcomes, and three rated low for study design, giving the intervention an overall rating of "strong support for causal evidence."

Population of Focus

A&CT can be used with a wide variety of populations and age groups to reduce negative behaviors and improve mental health. Populations of focus often include individuals with substance use disorders (SUDs)[20] and people experiencing chronic pain.[21]

Studies included in this evidence review focused on the general college student population, as well as students seeking services from their college counseling centers.[22-23]

Of the studies reviewed, one did not report demographic information of participants.[24] Of the seven studies that did, at least two-thirds of the participants were female in six,[22-23, 25-28] and about half of participants were female in the other.[29] Participants across all seven studies reporting demographics were predominantly White and in four of these studies 10-16 percent of participants were Hispanic or Latino/a.[23, 25, 27-28]

Practitioner Types

Typically, a provider trained in individual or group A&CT implements the treatment. Recent adaptations include using an online, self-guided format, either as standalone or in conjunction with provider-led, in-person sessions.[30-32]

Some studies included in this review delivered A&CT through a self-guided, web-based platform.[27] One study used an in-person, group format led by a facilitator.[23]

Intensity and Duration of Treatment

The duration of A&CT can vary widely, but it is desirable to hold enough sessions to cover the six core principles. One study instructed participants to complete six web-based sessions over four weeks,[27] while another study delivered A&CT more frequently but with briefer sessions (12 biweekly, web-based sessions, each taking 15–30 minutes to complete).[28]

Core Processes of Acceptance and Commitment Therapy (A&CT)

1 ACCEPTANCE: Embracing of one's own experiences, thoughts, and feelings rather than avoidance

2 SELF AS CONTEXT: Being aware of what one is thinking, feeling, doing, and sensing in any moment

3 COGNITIVE DEFUSION: Diminishing the strength of negative thoughts by separating or distancing oneself from these thoughts or memories

4 VALUES: Knowing what matters and is important; choosing behaviors aligned with those values

5 BEING PRESENT: Consciously paying attention, engaging, and connecting with what is happening in the moment

6 COMMITTED ACTION: Taking action and achieving concrete goals consistent with personal values

Source: Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and Commitment Therapy: Model, processes and outcomes. *Behaviour Research and Therapy, 44*, 1-25.

Outcomes

Studies that contributed to the strong rating of this intervention demonstrated that A&CT with college students had the following outcomes:

- Decrease in distress[27, 28]
- Decrease in social anxiety[27]

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Cognitive Behavioral Therapy (CBT)

🔍 Ⓢ Strong Evidence

Overview

Cognitive behavioral therapy (CBT) is a short-term, goal-oriented psychotherapy treatment enabling individuals to understand their current problems, challenges, and experiences and change patterns of thinking or behaviors. It is commonly used to address depressive and distortive thoughts associated with depression, generalized anxiety disorders, suicidal ideation, eating disorders, and SUD.

CBT helps clients develop accurate assessments of circumstances and their feelings so they can develop realistic strategies to address them. With the CBT approach, clients are trained to evaluate inaccurate thoughts, actions, and negative feelings that may contribute to their depression, anxiety, suicidal ideation, and/or other mental distress.[33]

CBT treatment usually draws on a variety of strategies to try to change clients' thinking and behavioral patterns. These strategies might include building awareness of one's thoughts, identifying negative or inaccurate thoughts, developing a greater sense of confidence, facing one's fears, positive self-talk, and stress management techniques, among others.[34-37]

CBT is available in a variety of forms, including individual therapy, group therapy, and computerized or Internet-guided delivery. These modalities all draw on the foundational principles and goals of CBT described above. However, they can vary widely on several characteristics, including format, duration, and delivery. For each modality, there are also different manuals and implementation protocols.

Twenty-five studies of CBT met the criteria for evidence review. Of these, seven were rated high and four were rated moderate. Fourteen were rated low because they were pre-post design studies or reviewers identified weaknesses in their study designs.

The 11 high and moderate studies gave CBT an overall rating of "strong support for causal evidence." All 11 studies included either group CBT or computerized CBT for the population of focus. Evidence reviewers did not find any studies for individual CBT for this population (i.e., college students) that were rated moderate or high. However, individual CBT is known to be evidence-based, with a solid research base for diverse populations and, hence, is included in this guide.

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Population of Focus

The populations of focus were different for the three modalities of CBT. For the studies included in this review:

- **Individual CBT** was used with students who had body image concerns and/or eating disorders,[34-35] attention deficit hyperactivity disorder (ADHD),[36] and depressive symptoms.[37-38] Of the five individual CBT studies reviewed, participants in four studies were more than three-fourths female.[38-42] In three studies, more than 60 percent of participants were White.[39-40, 42] In one study, 40 percent of participants were Black[38], while one study included a sample that was one-third Hispanic[42], and another had a sample that was about one-third Asian.[41]

- **Group CBT** was used with students with ADHD,[43-44] with or at-risk for depression,[34, 36-37, 45-47] with social anxiety disorder (SAD),[31] with public speaking anxiety,[24] and with maladaptive perfectionism.[48] Most of the studies reviewed had predominantly female samples.[24, 34, 36-37, 43,45-47] Two studies had samples that were one-half female.[35, 48] In six studies, more than 60 percent of participants were White.[35, 43,45-47] In one study, more than 90 percent of participants were racial/ethnic minorities.[36] Three studies did not present racial/ethnic demographics for their samples.[24, 34, 36]

- **Computerized CBT** interventions were used with general student populations,[49-51] students at-risk for or diagnosed with an eating disorder,[52-53] and students with symptoms of anxiety and depression.[54] All six studies of computerized CBT interventions had samples that were predominantly female.[49-54] In five of these studies samples were also predominantly White[49-51, 53-54]. In the other study half of particants were White, about 20 percent were Asian, and the remaining 30 percent were other racial/ethnic minorities.[52]

Practitioner Types

Individual CBT is implemented in different ways and various manuals for this intervention exist. Consequently, the particular training and/or certification required to deliver this therapy also varies. In the reviewed studies, individual CBT was typically delivered by trained psychologists and/or therapists.[41-42] In one study, doctoral students in clinical psychology delivered individual CBT to students.[39]

There is also a myriad of manuals for variants of group CBT, and training and/or certification for each variant may differ. In the reviewed studies, trained psychologists and/or therapists typically delivered group CBT.[37, 44-45, 47] However, several studies also relied on trained graduate or doctoral students to facilitate or co-facilitate group CBT sessions.[24, 35, 43, 46, 48]

As the name suggests, computerized CBT is delivered to students via computer or mobile app-based platforms. Typically, these platforms present CBT content through video modules or other tools and are therefore self-guided. However, in two of the studies included in this review, online materials were supplemented with limited personal contact; in one study, this comprised scripted support messages sent by program staff, while the other study included weekly motivational messages and up to two phone calls with coaches, who were trained post-secondary students.[50, 53]

Intensity and Duration of Treatment

There is no standard length or prescribed number of sessions for individual CBT.[55] The overall intensity and duration of treatment depends on the kind and severity of problems experienced by the student. However, individual CBT is generally considered to be a shorter-term therapeutic approach.[56] In the reviewed studies, individual CBT was typically delivered once a week, with overall duration varying from 3 to 12 weeks.[38-39, 41]

Group CBT is typically more structured than individual therapy. However, treatment intensity and length may still vary depending on the specific protocol practitioners use and the kinds of problems they treat. In the reviewed studies, group CBT was typically delivered once a week for one to two hours, with overall duration varying from four[24, 47] to eight or more sessions.[35-36, 43-44] One study used a single, multi-hour group workshop approach,[48] though this is not typical for group CBT delivery.

The intensity, duration, and structure of computerized CBT treatments vary, depending on the specific program. In the reviewed studies, some programs set weekly schedules for the content they wanted users to cover, while others provided full access to the platform and allowed users to work at their own pace. For more structured platforms, the overall length of treatment ranged from 2 to 10 weeks.[52, 54]

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Outcomes

Studies of individual CBT with a college student sample did not contribute to the high rating of this intervention, so the outcomes from those studies are not included. However, in general population studies, individual CBT is associated with reduction in anxiety[54] and depression.[55]

Studies that contributed to the high rating of this intervention demonstrated that use of group CBT with college students had the following outcomes:

- Decreases in overall depressive symptoms[36-37, 45, 59]
- Decreases in overall anxiety symptoms[36-37]
- Reduction in negative thinking[59]
- Reduction in levels of worry[37]
- Improvements in self-esteem[59]
- Improvements in life satisfaction and happiness ratings[36]

Studies that contributed to the high rating in this evidence review demonstrated that use of computerized CBT interventions with college students had the following outcomes:

- Decreases in overall depressive symptoms[53-54]
- Decreases in eating disorder symptomology,[53] binge eating frequency,[53] and compensatory behaviors (e.g., excessive exercise)[53]

Dialectical Behavior Therapy (DBT)

(M) Moderate Evidence

Overview

Dialectical behavior therapy (DBT) is a psychotherapy treatment originally developed by Dr. Marsha Linehan to treat individuals at-risk for suicide[60] and/or those with borderline personality disorder (BPD).[61] DBT is commonly used to address depressive symptoms, SUDs, post-traumatic stress disorders, and a wide range of other disorders. It focuses on dialectical or opposing strategies of acceptance and change.[61]

DBT has been primarily studied with BPD populations, for which it has been effective at reducing suicidal behaviors and non-suicidal self-injury (NSSI).[62-64] It also has proven efficacy at treating NSSI and depression in adolescents.[64]

Research is limited on DBT's specific effects on college-aged populations. Of the 10 studies eligible for this review, 3 were rated high. Seven were rated low because they were pre-post design studies or reviewers identified weaknesses in their study designs. Of the three highly rated studies, one showed statistically significant positive outcomes. These findings give the DBT intervention an overall rating of "moderate support for causal evidence."

Components of Dialectical Behavior Therapy (DBT)

DBT Skills Training, which teaches clients skills in mindfulness, distress tolerance, interpersonal effectiveness, and emotion regulation.

Individual Psychotherapy, designed to enhance client motivation and apply skills to manage their lives and confront specific challenges.

In-the-Moment Phone Coaching, in which therapists provide coaching to clients on how to apply the skills learned and cope with everyday challenges.

DBT Consultation Teams for Therapists, through which therapists are supported and treatment fidelity is monitored.

Source: Behavioral Tech (n.d.) What is Dialectical Behavior Therapy (DBT)?. https://behavioraltech.org/resources/faqs/dialectical-behavior-therapy-dbt/

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Population of Focus

While DBT was originally designed for use with BPD populations, it has since been used with a wide variety of populations to treat an array of mental health concerns. In the studies included in this review, DBT was used for students with test anxiety, with attention-deficit/hyperactivity disorder (ADHD), who reported serious problems with emotion regulation, with symptoms of mood disorders, and those seeking other treatment recommended by college counseling centers.[65-70]

Of the ten studies reviewed, six included samples that were predominantly female.[68, 70-75] Two studies had samples that were slightly more than half female,[65-66] one study was slightly more than half male,[67] and one study did not report any demographic data.[69] Participants in four studies were predominantly White[68, 70-71, 74] while two studies had samples that were about half White,[67, 72] and one study was predominantly composed of racial/ethnic minority students.[72-73] Three studies did not report on the racial/ethnic backgrounds of participants.[65-66, 69] In one study, about 30 percent of students identified as LGBTQ+.[75]

Practitioner Types

DBT practitioners typically undergo intensive training to obtain certification. Certification is offered through the DBT-Linehan Board of Certification (DBT-LBC) to licensed mental health professionals. It requires practitioners to complete 40 hours of didactic training and complete a written exam.[76] In the reviewed studies, DBT was usually delivered by teams including at least one therapist who had undergone certification training, as well as other facilitators, such as counseling center staff, clinical psychology graduate students, and/or nurse practitioners who participated in shorter training modules.[70-72]

Intensity and Duration of Treatment

DBT typically has a duration of about 24 weeks, consisting of weekly skills training groups in addition to hour-long weekly individual therapy sessions. DBT's phone coaching component permits clients to call their therapist between sessions to receive in-the-moment coaching and care. However, of the studies included in this review, several used adapted DBT models, which consisted predominantly of the DBT skills training group component.[65-68, 70, 72-74] These skills group-based therapies varied in duration from 4 to 13 weeks.

Outcomes

Studies that contributed to the moderate rating in this evidence review demonstrated that DBT with college students had the following outcomes:

- Reductions in suicidal ideation[75]
- Reductions in overall depressive symptoms[75]
- Decreased number of non-suicidal self-injury events[75]
- Improvements in social adjustment[75]

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Summary of Evidence Review

The guide's evidence review provides support for five practices for prevention and treatment of anxiety, depression, and suicidal thoughts and behaviors among college students, which are summarized below.

Intervention	Gatekeeper training	MBSR	A&CT	CBT	DBT
Review rating for use with college students	Strong evidence	Strong evidence	Strong evidence	Strong evidence	Moderate evidence
Scope	Non-clinical	Clinical	Clinical	Clinical	Clinical
Care continuum	Prevention	Treatment	Treatment	Treatment	Treatment
Intensity and duration of treatment	A single training event	Eight weekly group sessions, lasting 2.5 hours each, and a daylong retreat after the sixth week	As many sessions as required to cover the six core principles	No standard length or prescribed number of CBT sessions	Typical duration is 24 weeks, consisting of weekly individual and group sessions
Specific training available	✓	✓	✓	✓	✓
Web-based version available	✓	✓	✓	✓	✓
Can be practiced by peers	✓	–	–	–	–

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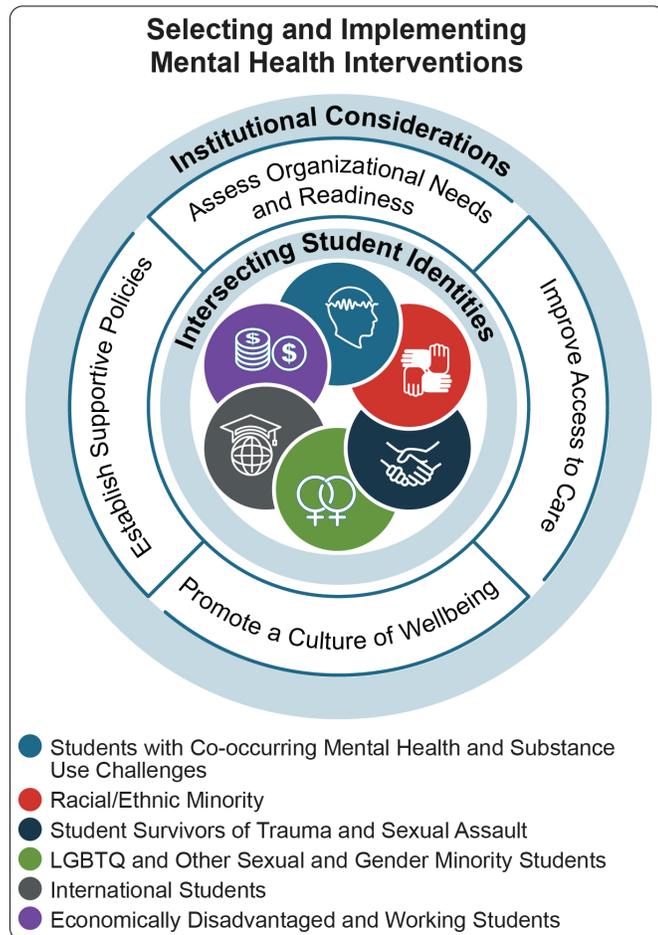
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Guidance for Selecting and Implementing Practices

This chapter provides information for clinicians, counselors, program or college administrators, and other stakeholders interested in implementing an evidence-based intervention to address college students' mental health needs.

Selecting and Implementing Mental Health Interventions

- ● Students with Co-occurring Mental Health and Substance Use Challenges
- ● Racial/Ethnic Minority
- ● Student Survivors of Trauma and Sexual Assault
- ● LGBTQ and Other Sexual and Gender Minority Students
- ● International Students
- ● Economically Disadvantaged and Working Students

The chapter first discusses student-level considerations for practitioners to consider when developing strategies to engage and treat students. Understanding the potential challenges particular student groups have or may experience in their lives allows practitioners and administrators to select and implement the most appropriate practices to meet students' needs.

This chapter also identifies specific strategies colleges can employ at the institutional level to promote student well-being and mitigate implementation challenges.

Considerations When Implementing Mental Health Services for Students

Each student seeking help at a counseling center and/or initiating treatment will present with a unique set of symptoms, experiences, and identities. However, certain groups may exhibit particular characteristics related to their mental health, including common stressors, factors influencing service utilization, and treatment preferences.[1] Special issues and considerations for diverse student populations are presented below, along with strategies for management or implementation of mental health treatment services.

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While diversity topics are presented separately, it is important to note that they are intertwined and intersecting. Further, this is not an exhaustive list of diversity parameters or student identities. Finally, while making therapy decisions, practitioners should consider each student the expert on themselves and their identities.[2]

Campus counseling professionals should use a trauma-informed approach while working with students. This approach includes integrating principles of safety, trustworthiness, transparency, peer support, collaboration, mutuality, empowerment, language access, and cultural competency.[3] Practitioners may refer to the Substance Abuse and Mental Health Services Administration's (SAMHSA's) Treatment Improvement Protocol (TIP) on Trauma-Informed Care in Behavioral Health Services for more guidance on implementing a trauma-informed lens when delivering treatment services.

Additionally, colleges should consider using a trauma-informed design when creating the physical space for a counseling center. These designs create spaces that are welcoming and safe, while respecting privacy, identity, and dignity and promoting empowerment.[4]

Students With Co-occurring Mental Health and/or Substance Use Concerns

Consideration:
Students exhibiting common mental health symptoms, such as anxiety or depression, may also have or show symptoms of co-occurring conditions, such as eating disorders, substance use disorders (SUD), and/or serious mental illness (SMI).

Strategies:
- Practitioners treating students with co-occurring conditions should consider the full range of services available on campus and work with the student to plan comprehensive treatment. They can provide students with wraparound care by coordinating across multiple entities (e.g., counseling centers, academic departments, housing, and residential life offices). Students with alcohol misuse and/or substance use disorders, for example, may benefit from campus-based 12-step programs, substance-free housing, or sober social events.[5] Practitioners can help students gain access to available services on campus.

- In addition to care on campus or through college treatment centers, practitioners might consider referring students with co-occurring disorders to off-campus providers. Off-campus treatment providers may offer advantages like more advanced training, familiarity with specific conditions, anonymity for the student, or more in-depth and/or diverse treatment options. These advantages must be balanced with the potential cost, insurance availability, and transportation barriers before making service decisions.

Student Survivors of Trauma and Sexual Assault

Consideration:
Students experiencing mental health challenges may also have experienced previous trauma, including sexual assault. Survivors may avoid treatment because of fear of stigma, concerns about confidentiality, or a desire to avoid traumatic memories.

Strategies:
- Students who display symptoms of anxiety and depression may also have needs related to trauma. These students may need referral to and treatment from a specialist who is trained in treating young adults who have experienced trauma. Counseling centers should establish protocols and workflows to ensure practitioners screen each student for potential specialized services with partnering agencies on- or off-campus. It is best practice to establish memorandums of understanding (MOUs) and/or strong consultative relationships with area specialists in trauma to facilitate continuity of care and continued academic success.

- In addition to referrals to off-campus specialists, all college counseling clinical staff should be trained in appropriate interventions. College counseling centers should also consider supporting professional development and training opportunities for at least two onsite specialists.

- Practitioners and other stakeholders should carefully anticipate and avoid clinical procedures or unintended triggering events that might re-traumatize students. These could undermine trust and slow treatment progress. Campus awareness-raising and advocacy events should be vetted by counseling staff for triggers and/or appropriate trigger warnings.

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LGBTQ and Other Sexual and Gender Minority Students

Consideration:

Students belonging to a sexual or gender minority may believe that available services will not support their sexual or gender identity and may avoid seeking help as a result.[6]

Strategies:

- Practitioners should take steps to make services inclusive of all students, including sexual and gender minorities. For example, practitioners should address students using their preferred names and pronouns to affirm their identities (even if legal name and sex assigned at birth are required for administrative purposes).[1] The Association for Lesbian, Gay, Bisexual, and Transgender Issues in Counseling's (ALGBTIC) Competencies for Counseling LGBQIQA and Competencies for Counseling Transgender Clients present a number of steps practitioners can take to improve their counseling approach and produce a safe, supportive, and caring environment for individuals.

- Practitioners should take particular care to ensure confidentiality and assure students that their personal information, including sexual orientation and gender identity, will never be disclosed.[1]

- Practitioners should inquire about microaggressions when treating students to gain a clearer picture of their stressors. They should also examine their own potential microaggressions and seek education opportunities for themselves and other counseling staff to address these issues.[7] Practitioners should be well-versed in policies and procedures necessary to file bias complaints should a student report issues related to discrimination in the classroom. They should also be trained in offering supportive resources without forcing or coercing a student into reporting.

Racial/Ethnic Minority Students

Consideration:

Because of stigma, cultural mistrust, and lack of racial/ethnic representation in counseling centers, students who are Black, Indigenous, and people of color (BIPOC) may underutilize mental health services compared to their White peers.[8]

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Strategies:

- Colleges should consider diversifying staff who provide mental health services. The racial and ethnic composition of counseling center staff predicts the likelihood of help-seeking for some student populations. For example, the greater the percentage of African American therapists at a counseling center, the more African American students will seek help.[9] There should be organizational processes in place that allow students to select practitioners with shared identity, whenever available.

- Colleges and practitioners should provide culturally sensitive settings for students. This includes acknowledging minority students' experiences of racism and oppression,[10] encouraging students to become active in cultural groups and opportunities,[11] asking students whether they observe any religious or traditional customs that may be helpful in their treatment, and creating safe spaces for student discussion or race-related issues.[10] The Steve Fund and JED Foundation's [Equity in Mental Health Framework](#) provides guidance to colleges aiming to better support the mental health needs of minority students.

- When a practitioner identifies their own privileges and biases, both internally in their own clinical training and as appropriate to their clients, it can improve the therapeutic relationship and affirm their clients' identities and experiences.[2] Colleges should consider implementing staff trainings to develop skills, knowledge, and attitudes related to providing care for and understanding the challenges faced by students of color.

International Students

Consideration:

International students may experience challenges related to their cultural concepts of well-being and mental health.[12] Additionally, they are likely to be farther away from their support network of family and friends back home compared to their peers.

Strategies:

- International students may not be aware of mental health support services available on campus, based on experiences in their home country. Focused outreach efforts to international students will help increase awareness of these services.

- Practitioners should consider referring students whose native language is not English and who are not fluent in English to an outside provider who speaks their language. International students may also prefer working with a provider of the same cultural background as themselves. Further, if these services are not available, they should arrange for a professional interpreter (not a family member) when there is a language barrier.

Economically Disadvantaged and Working Students

Consideration:

Students from lower socioeconomic backgrounds and working students may face challenges in seeking and receiving treatment while in college, such as concerns about paying for services and scheduling difficulties.[13]

Strategies:

- Colleges should educate students on services that are already fully or partially covered by tuition and fees.

- Counseling centers should publicize their hours of operation and offer extended and/or flexible hours for treatment when possible.[14-15] Virtual services may also be useful for students with scheduling constraints.[1] Special efforts should be made to accommodate students who have urgent care needs.

- When relevant, practitioners may also provide or refer students to case management or other services to assist them with financial, housing, relational, or other issues.[14]

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Institutional Considerations for Implementing Mental Health Services

Implementing mental health practices on campus requires institutional support. There is tremendous variation across institutions of higher education, and each institution will face a unique set of challenges. Colleges need to explore ways in which they can adapt programs/strategies to meet their needs and constraints while still implementing the core components of the intervention.

Before a college implements a new intervention or service, it is important to consider a range of factors. Institutions must ensure that there is appropriate space, technology, training, support, and financial and human resources to implement and sustain new mental health services. The following section provides strategies colleges might consider using when establishing a new mental health program.

Strategies to Assess Organizational Needs and Readiness

Prior to implementing new or expanding upon existing college mental health programs, institutions and counseling centers should conduct a needs assessment to explore the following factors:

- **Identifying available internal resources and local factors:** Colleges need to begin by identifying internal resources (e.g., staffing, technology, space) and local factors (e.g., geography, type of college, availability of transportation and services in the community for referrals) that could affect service delivery and/or be leveraged for implementation. They should use available data to determine whether counseling centers and other campus health services can sufficiently handle caseloads and to identify program gaps. Finally, colleges should assess the "readiness" of the institution to implement a new program successfully.[16]

- **Reviewing existing protocols:** Colleges should review existing protocols related to mental health services provision, such as those for crisis management, confidentiality, and medical leave, and determine if any revisions are needed for the new program(s) (e.g., additional cybersecurity protocols for implementation of an online cognitive behavioral therapy intervention).

- **Exploring financial implications:** Colleges should determine the costs of implementing and sustaining new mental health programs. Administrators should make decisions about whether current resources are sufficient or whether additional funds need to be raised, for example through increasing student health fees, charging fees for use of specific services,

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reallocating funds from other campus priorities, or working with insurance companies to seek reimbursement.[1, 17] It is important to note that program investments may pay dividends in the future through improved academic performance, retention, and graduation rates.[18]

- **Considering characteristics of the student population:** Colleges would benefit from identifying the characteristics of student populations for whom new programs would be implemented, such as unique risk factors, cultures and identities, and barriers to care and making adaptations to facilitate program implementation. Practitioners should use a trauma-informed care approach for therapy with students. Whenever possible, students should be involved in making decisions about their own mental health support services.

Based on results of the needs assessment, institutional leaders should work with their student health teams, administrators, student representatives, and other stakeholders to create an implementation plan that includes the following:

1. Institutional priorities, staffing and/or technology needs, necessary changes to existing policies or systems, and training needs

2. Plans to address equity in delivery of the program

3. Quality improvement plans and expected short- and long-term outcomes with a strategy for measuring them

4. Logic model illustrating the required inputs, planned program activities, and how they will produce desired outcomes (W.K. Kellogg Foundation's logic model development guide can help teams create their logic models)

Strategies to Improve Access to Care

When considering new interventions to support students' well-being, institutions should decide how students will access those interventions. Potential strategies to improve access include:

- **Integrating care where possible:** Integrated care (creating a unified healthcare model) enhances access to services, facilitates timeliness and follow-through on referrals, improves service quality, utilization, and efficiency, and, ultimately, improves student outcomes.[19-21] Schools can integrate care by:

  - *Promoting a "No Wrong Door" approach:* Colleges may have multiple campus organizations, such as the campus counseling center or the healthcare center, that provide mental health screening and counseling services. Regardless of where they enter the campus mental health system, students should be assured that they will receive thoughtful care and be directed to the most appropriate services.[22]

  - *Considering use of electronic medical records (EMRs) or electronic health records:* EMRs and EHRs improve coordination of services and facilitate communication between different providers on campus.

  - *Integrating off-campus providers:* At times, staff may lack the expertise or capacity to appropriately serve students, such as those with chronic mental health needs.[22] In such cases, it may be appropriate to integrate on-campus care with off-campus healthcare providers. Investing in case management and resource navigation staff can help students access appropriate services within an integrated care system.

- **Mitigating structural barriers to care:** Students may face barriers such as a lack of time, financial constraints, or transportation issues when seeking care.[1, 13] Strategies to mitigate these barriers include:

  - *Using technology to overcome scheduling or transportation barriers:* Providing online resources, virtual self-guided programs, or telehealth options can reduce these barriers and increase access to care for all students. The Higher Education Mental Health Alliance (HEMHA) developed a guide for implementing telemental services in college settings.

  - *Considering the academic calendar and planning accordingly:* School breaks may result in problems related to continuity of care. If possible, counseling centers should establish services during break periods for students remaining on campus and identify strategies for continuing care with students who will be away from campus. With the student's consent, counselors can work with parents to help students continue care

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if going home. At a minimum, counseling centers should provide information on their websites about what to do when centers are closed. Practitioners may also be able to make use of the previously discussed strategies around integrating with off-campus providers and telehealth.

– *Educating students on available services and their costs:* Many campuses offer no or low-cost mental health treatment services on campus, but students are not always aware of the actual costs involved (or lack thereof).[23] Counseling and administrative staff should inform the students via center websites about services that are already covered by student health fees and/or insurance or are free.

– *Increasing staff:* Limited capacity to serve help-seeking students continues to be a significant barrier to care. Hiring additional counselors, clinicians, case managers, or other staff is a direct way to increase institutional capacity to meet students' help-seeking needs and can serve as a long-term investment in mental health service capacity.

– *Creating a behavioral intervention team (BIT) to detect risk factors in student behaviors:* Colleges should consider creating a BIT to collect data and collaborate in identifying and mitigating risk factors in student behaviors across the campus. Colleges should ensure that varied partners across the campus, beyond student health agencies, are invited to be a part of these teams.

Strategies to Promote a Culture of Well-Being

Stigma continues to be a major barrier to students seeking help for mental health needs.[13, 24] Colleges should develop and maintain a culture of inclusivity and support to reduce stigma and normalize help-seeking. Potential strategies include:

- **Integrating the importance of health and well-being into all policies, practices, and discussions on campus across both administrative and academic operations:** Colleges can refer to existing guides, such as the Okanagan Charter and others listed at the end of this chapter to implement this strategy.

- **Increasing visibility about the importance of mental health by engaging department chairs, faculty, staff, mentors, and students in discussions of mental health issues:** Colleges may want to create a high-level task force of staff that typically have contact with students, such as resident advisors and academic counselors, or establish a "campus team" to improve coordination and communication across campus departments about mental health issues and potential crises.

- **Promoting active and supportive social relationships:** Colleges can develop smaller "living and learning communities" to foster social groups formed on academic majors or other interests, or otherwise encourage students to join or form campus organizations.[16] Mental health information should also be disseminated to parents to help them recognize stress in their children and foster strong familial relationships.

- **Promoting campus wide mental health:** Colleges can implement trainings and offer support to reduce stress and promote well-being across the campus. All staff interacting directly with students should also understand the role of campus counseling centers and when and how to refer students for care. They should help normalize help-seeking behaviors, promote the de-stigmatization of mental health treatment, and promote self-care and counseling as sustaining measures for well-being.

- **Educating campus community members:** Colleges can help staff, faculty, and students on campus identify and respond to mental health warning signs, both for themselves and others. This preventive measure can be implemented by providing periodic training on mental health issues and responding to individuals in distress. In a recent survey, most faculty members indicated that they feel responsible to help students dealing with mental health concerns and that they would appreciate receiving training on how to support them.[25]

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Legal Considerations

At the federal level, three main pieces of legislation are pertinent to colleges' delivery of mental health services:

The Family Educational Rights and Privacy Act (FERPA): FERPA is a federal law that protects students' educational records, including treatment records for care provided on campus at student health or counseling centers. Under FERPA, students' treatment records are only available to professionals providing treatment to the student or other professionals of the student's choice.

The Health Insurance Portability and Accountability Act (HIPAA): HIPAA is a federal law that creates national standards for the protection of personal health information. Typically, FERPA supersedes HIPAA for care provided on campus. However, HIPAA regulations will apply to information kept by community healthcare providers to whom students may be referred or who may provide integrated care.

Title IX: Title IX is a federal law protecting individuals in education programs/activities from discrimination based on sex and applies to any institution receiving federal funding from the U.S. Department of Education. With respect to student mental health services, Title IX has important implications when it comes to sexual assault disclosures. This legislation grants protections to those reporting sex discrimination, including sexual violence. It also obligates some employees to report incidents and trigger an investigation. Colleges should clearly explain the reporting obligations of all employees, and make sure students know where they can find confidential support services.

Colleges should always consult with their general counsel offices regarding their approach to the above legislation. In addition, colleges should be aware that state/local regulations may also apply and need to be considered.

Policies to Support Students' Mental Health and Education

Poorly designed mental health policies, particularly those for medical leave, can create barriers to students seeking help.[26] Institutions can shape their campuses by establishing policies that support students' mental health decisions by:

- **Standardizing and implementing fair policies:** Colleges should develop transparent and standardized medical leave policies that are flexible, focused on student wellness, and developed with student participation. Additionally, the policies should be easy to access, no more rigorous or punitive than those for other medical absences, and explicit in terms of financial and academic consequences.[27]

- **Designing specific protocols:** Colleges should design crisis protocols specifically for acutely distressed or suicidal students, including risk assessments, safety plans, emergency contact notification procedures, and policies guiding involuntary and voluntary leave and/or hospitalization.

- **Establishing clear privacy guidelines:** If necessary, colleges should develop institutional release of information forms with off-campus providers to set up communication protocols and policies for sharing student health information.

- **Establishing and enforcing policies for co-occurring conditions:** Colleges should take measures to reduce alcohol and substance use, such as eliminating alcohol sponsorship of athletic events or other campus activities and alcohol advertising in college publications.[28] Colleges should also consider implementing medical amnesty policies (laws or acts protecting those who seek medical attention from liability as a result of illegal actions), as they address issues like underage drinking or possession of alcohol.

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Resources

Numerous resources are available to help health practitioners and administrators implement new mental health programs in a college setting.

Overall Frameworks and Guides for Campus Health

- The Okanagan Charter provides colleges with a common language and set of principles to become a "health and well-being promoting campus."

- The Steve Fund and the JED Foundation's Equity in Mental Health Framework provides institutions with action-oriented recommendations and strategies to strengthen mental health supports for students of color.

- The JED Foundation's Comprehensive Approach to Mental Health Promotion and Suicide Prevention describes strategic areas that should be addressed in community efforts to support mental health and address substance misuse.

- The JED Foundation's Campus Mental Health Action Planning Guide provides readers with a set of principles and recommendations to guide development of a comprehensive plan for mental health promotion on campus.

- The American College Health Association's Trauma Informed Care on College Campus provides a framework for implementing the approach specifically on college campuses.

Tools and Guidance for Implementation

Overall Implementation Guidance

- HEMHA published College Counseling From a Distance: Deciding Whether and When to Engage in Telemental Health Services, a guide focusing on topics for campuses considering implementing telehealth options for students.

- HEMHA's Balancing Safety and Support on Campus guide summarizes literature on "campus teams" and helps colleges make decisions about how these teams should be structured, what they should be tasked with, and how they should operate.

- The JED Foundation's Framework for Institutional Protocols for Acutely Distressed or Suicidal College Students guides administrators seeking to develop or revise protocols for crisis management.

- Center for Collegiate Mental Health's (CCMH) Clinical Load Index provides a distribution of staffing levels that can be used to inform decisions about the resourcing of mental health services in colleges and universities.

Screening Tools

- California Community College Mental Health Screening Tools and an article published by California Community Colleges' Health and Wellness Center provide an overview of screening tools that can be implemented on college campuses.

Treating Particular Populations

- SAMHSA's TIP 57 on Trauma-Informed Care in Behavioral Health Services helps practitioners understand the impact of trauma and develop models of trauma-informed care to support recovery.

- SAMHSA's TIP 59 on Improving Cultural Competence helps practitioners understand the role of culture in service delivery and discusses racial, ethnic, and cultural considerations.

- The Council of National Psychological Associations for the Advancement of Ethnic Minority Interests published a brochure on Psychological Treatment of Ethnic Minority Populations containing guidance for practitioners working with minority patients.

- The Steve Fund's report provides strategies to promote mental health and emotional well-being of young people of color.

- ALGBTIC's Competencies for Counseling LGBQIQA and Competencies for Counseling Transgender Clients present steps practitioners can take to improve their counseling approach and produce a safe, supportive, and caring environment for sexual and gender minority individuals.

Implementation Tools

- The American Foundation for Suicide Prevention's Interactive Screening Program is an online program for campuses that connects students to brief mental health screening and allows them to communicate with counselors and learn about available services.

- The Community Toolbox is a free online resource providing hundreds of training videos on topics related to building healthier communities.
- Campus leaders can use the Healthy Minds Return-on-Investment (ROI) tool to estimate the potential returns on new investments in student mental health.
- The W.K. Kellogg Foundation's logic model development guide helps teams create logic models for their programs.
- The Jed Foundation and the Clinton Foundation's Help a Friend in Need guide can help students identify signs of emotional distress in social media posts and content.
- The Association of College and University Educators' Creating a Culture of Caring provides practical approaches for college and university faculty to support student well-being and mental health.

Substance Use Prevention

- The National Institute on Alcohol Abuse and Alcoholism's College AIM tool can help college leaders identify effective alcohol and drug misuse prevention strategies.
- The Drug Enforcement Administration's Strategic Planning Guide for Preventing Drug Misuse Among College Students provides colleges with a robust framework to implement drug misuse interventions.

Background Literature

- SAMHSA's Behavioral Health Among College Students Information and Resource Kit discusses the prevalence and consequences of substance misuse among college students and provides readers with summaries of current knowledge, links, and directions that make it easier to locate prevention materials.
- The National Academies of Sciences, Engineering, and Medicine published Mental Health, Substance Use, and Well-Being in Higher Education, a consensus study report outlining a variety of possible approaches and recommendations to support delivery of mental health and substance use services and meet students' needs.
- The SAMHSA white paper Promoting Mental Health and Preventing Suicide in College and University Settings describes literature on suicide and suicide prevention on campuses and some prevention efforts.
- The American College Health Association developed a module for colleges to review FERPA and HIPAA legislation.
- The Bringing Theory to Practice's volume Well-Being and Higher Education: A Strategy for Change and the Realization of Education's Greater Purposes is a collection of essays exploring the connections between higher education and mental health and calling on institutions to take an active role in promoting well-being.

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Examples of College Mental Health Programs

This chapter highlights four examples of mental health programs providing prevention and treatment services to college students experiencing mental health concerns. It documents how each program uses one or more of the interventions with strong or moderate evidence of use with college students detailed in Chapter 2:

- Gatekeeper Trainings
- Mindfulness-Based Stress Reduction (MBSR)
- Acceptance and Commitment Therapy (A&CT)
- Cognitive Behavioral Therapy (CBT)
- Dialectical Behavior Therapy (DBT)

The chapter describes how colleges have implemented these interventions as part of a comprehensive strategy to address the needs of their student populations.

Colleges should implement interventions with fidelity to evaluated models. Fidelity is the degree to which a program delivers a practice as intended and must be maintained for desired therapy outcomes. Many colleges adapt chosen interventions to better serve their specific student populations. As practitioners modify these interventions to address the needs and constraints of their population, budget, setting, and other local factors, they should adhere to the intervention's foundational principles.

The four programs in this chapter were identified through an environmental scan in consultation with experts. Although the programs highlighted below were implemented on college campuses, these colleges differ in their size, type, and location. Efforts were made to highlight programs from a diversity of institutions. These programs are meant to be implementation examples and have not been subject to rigorous evaluation.

To be included in this chapter, programs had to:

- Implement one or more of the practices identified in Chapter 2
- Be replicable
- Provide appropriate and effective interventions for varied geographic areas, sizes and types of institutions, and diverse populations

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Denison University

On the Denison University campus, mental health services are co-located with physical health services at the Wellness Center. The Wellness Center delivers culturally responsive and trauma-informed care through a holistic view of wellness. With 35 staff members, including 7 mental health clinicians, the team addresses biological, psychological, and social factors that affect an individual's overall well-being. They offer immediate, same-day counseling in addition to longer-term therapy.

The Wellness Center administers a brief depression module, the PHQ-9 (Patient Health Questionnaire-9), to all students who come through its doors, whether they are seeking behavioral health services or medical services. To promote mental well-being to the entire campus community, the Wellness Center provides Gatekeeper Trainings to interested parties across campus, using both in-person (Question, Persuade, and Refer) and online-based modalities. Through the school's Active Minds chapter, Denison offers Mental Health First Aid on campus and has also extended the training to the local community.

The online care report system provides another means for Denison community to support mental health. Any employee, student, or family member can submit an online care report if they are concerned about an individual's well-being. A care team can then respond to imminent situations, while also tracking and observing patterns of behavior, such as school absences or interpersonal conflicts. The care team may also offer support to the student's friends and family who are impacted by the situation.

Denison University promotes mindfulness practices through a combination of campus-wide approaches, programs, and therapies. Incoming students can sign up for a four-day mindfulness pre-orientation program before the start of the school year. "Pause and Relax" spots around campus allow for mindfulness breaks, while indoor and outdoor mazes encourage walking meditation. The Wellness Center offers ACT and DBT among its wide range of services, as well as a four-week Koru Mindfulness program focusing on breathing, relaxation, mindful practices, and stress management. Due to faculty support, students can now take these Koru classes for credit.

Location
Midwest

Type
Private liberal arts college (2,300 undergraduate students)

Demographics
- 20% of domestic students are students of color
- 15% of domestic students are first-generation college students
- 19% are international students

Evidence-Based Practices
Gatekeeper training, CBT, ACT, DBT

Related Resources
Denison's Health and Wellness homepage
Fresh Check Day national website

Finally, the Wellness Center also partners with community providers in nearby Columbus for students who need additional assistance outside of the scope of what the Wellness Center clinicians can provide. Staff can connect students to counselors who speak a particular language, or to programs that specialize in specific needs, such as eating disorder treatment. To help students locate services in their home state, Wellness Center staff utilizes ThrivingCampus, a nationwide provider database and referral system.

Features and Elements of the Approach
- **Therapeutic Adventure Group (TAG):** As an alternative to talk therapy, TAG helps students manage anxiety through experiential therapy and outdoor activities.
- **The Productivity Circle:** This is a group for students who would like to learn more skills to manage symptoms of attention-deficit/hyperactivity disorder (ADHD) and increase academic success (provided in collaboration with the Academic Resource Center).
- **Pause and Relax:** Signs are posted in peaceful places around campus, with QR (quick response) codes that link to mindfulness exercises.

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- **Fresh Check Day:** This is a campus-wide fair to raise mental health awareness. Student groups and university representatives run booths that have a wellness focus, such as self-care and sexual health.
- **Stress Hack Pack:** Students can order a stress relief package with various items to support relaxation, including a stress ball, essential oil spray, and tea bags.
- **Online Care Report System:** Any Denison community member can submit an online care report if they are concerned about an individual's well-being.
- **ThrivingCampus:** This is a national provider database and referral system to help students locate services in their home state.
- **24/7/365 Crisis Counseling Line:** The crisis line also includes an on-call clinician.

Ongoing Assessments

- Weekly "pulse surveys" allow the Wellness Center to improve services. These surveys focus on continuous quality improvement (CQI) and ask questions about student satisfaction with the implementation of services.
- The Wellness Center reviews Denison's results from the Healthy Minds Survey and the National College Health Assessment. The center then shares group-specific data with fraternities and sororities, LGBT groups, and other student organizations. Student groups reflect on what the results mean for them, and how they and the college can improve the experiences of the student body.
- A quasi-experimental study conducted with students on campus in 2020 demonstrated that students in the treatment group who went through four weekly sessions of Koru Mindfulness therapy showed multiple positive outcomes when compared to students in the control group. Koru Mindfulness participants reported greater mindfulness and self-compassion, higher functioning on performance-based measures of attention, and less stress, anxiety, and sleep problems.

Lessons Learned

- **Messaging is important.** Denison frames prevention as taking care of your mental fitness, just as you would with physical fitness. While formal therapy plays an important role in treatment, Denison has also prioritized promoting therapeutic activities which are accessible to all.
- **Empower people to take care of one another**. Denison trains the campus community to help one another through an upsetting event. While the counseling center can always offer assistance, a person's natural support system is the people around them.
- **Use clinician strengths and interests**. The Wellness Center assigns practitioners and therapists to various student groups based on their expertise and strengths. The group leader of the Productivity Circle has experience and expertise working with students with ADHD and works particularly with that population.
- **Contract out when needed**. Denison collaborates with nearby mental health providers for students who seek a greater diversity of counselors to meet their specific needs. The Wellness Center also partners with ProtoCall (an agency providing crisis line services) to provide after-hours crisis counseling care, which has the added benefit of easing the mental health burden on the clinical staff.

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Spelman College

The Counseling Center of Spelman College is grounded in womanist perspectives, aiming to support and empower the interconnecting and complex experiences of the whole person. Womanism draws attention to the intersections of a person's identity and acknowledges them as strengths, with respect of diversity and inclusivity. The Counseling Center staff reflect the demographics of the student body and understand many of the students' lived experiences. As a whole, the Spelman College community recognizes the importance of gender and race in creating a trauma-responsive campus.

The Counseling Center utilizes a stepped care model, ranging from online self-help to in-person treatment, including case management services. At each stage, students are encouraged to make their own decisions about mental and emotional health, as they work with licensed clinicians.

The adaptive stepped care model allows students to determine what level of service they would like to be introduced to first. For many students, their initial step within this service delivery model is accessing web-based resources. For these resources, Spelman contracts with Therapy Assistance Online (TAO), an online library of self-guided modules that teach personal, interpersonal, and cognitive skills. Students choose the content that is relevant to them and engage with as many sessions as they wish.

Students can receive ad hoc walk-in sessions or make appointments for brief therapy (six to eight sessions per semester). The counseling team of four licensed therapists provides services such as CBT, solution-focused brief therapy (incorporating short-term goals and positive psychology principles and practices), MBSR in individual and group formats, and psychoeducational workshops.

Case management services are also provided for students who need long-term therapy or specific services that are not available on campus. Clinicians support and guide students on using insurance directories and national provider databases, such as ThrivingCampus, as they find the right fit for a licensed mental health provider. Clinicians also connect students in crisis to a behavioral health facility off campus and maintain connection with them to support continuity of care.

Location
Southeast

Type
Historically Black college (HBCU), for women of African descent (2,100 undergraduate students)

Demographics
- Students from 43 states and 10 foreign countries
- 16% first generation college students

Evidence-Based Practices
MBSR, CBT

Related Resources
Counseling Center homepage

To benefit the larger community, the Counseling Center provides services via interdepartmental collaborations, campus events, and interactions with registered student organizations. For example, when faculty identify programs or classes which may activate traumatic responses, a request can be made for the presence of a clinician to provide emotional support, as needed. Student organizations may consult the Counseling Center during event planning and/or ask staff to give presentations on various topics, which address aspects of emotional wellness and coping strategies during times of crisis.

Mental health, emotional wellness, and students in crisis are also addressed via collaborations and in-service trainings for various departments, including Housing and Residential Life, the Coordinated Campus Response Team, and Public Safety. In support of a trauma-informed community, the Counseling Center hosted the training, *Creating a Responsive Trauma-Informed Community for Students in Higher Education: Ensuring Responsive Spaces for Our Students*, in collaboration with the Institute for Relational Development/Center for Gender and Justice.

Spelman College's holistic approach to wellness extends beyond the Counseling Center. Examples of emotional wellness within the greater college community include:

1. The Spelman College Museum of Fine Art's *Yoga in the Museum* provides yoga classes for students in a soothing environment surrounded by art that supports balance, restoration, strength, and concentration

2. The religious center, Sisters Chapel, is dedicated to cultivating the emotional and spiritual wellness of the student body by providing prayer spaces, worship services, and interfaith religious programming

3. The Wellness Center sound therapy programming applies sound frequencies to the body and mind of a person to create balance, harmony, and health

4. The Spelman Wellness Podcast includes a Counseling Center clinician in a conversation about the mind, body, and soul connection

Features and Elements of the Approach

- **Stepped Care Model:** This model includes self-help resources, workshops, brief therapy, case management, and crisis intervention.

- **Womanism-Based Framework:** The framework validates an intersectional identity of a person while treating mental health concerns.

- **Composition of the counseling team:** The counseling team reflects the demographics of the student body.

- **Therapy Assistance Online (TAO):** TAO is an online resource with interactive modules on personal, interpersonal, and cognitive skills.

- **The Counseling Couch:** This is an e-newsletter distributed to the entire campus community focusing on how students can identify, prevent, or address mental wellness concerns.

- **ThrivingCampus:** This is a national provider database and referral system to assist students in locating services off campus and/or in their home state.

- **Collaborative Activities:** The counseling Center partners with other college departments and organizations with a focus on emotional wellness and mental health.

Ongoing Assessments

- After changing its delivery model to the current stepped care model, the Counseling Center saw an increase in the number of students utilizing its services. Students now have self-agency to choose when and how to access the Counseling Center, whether through a walk-in/same-day appointment, short-term therapy, or participation in groups and workshops. The center serves approximately 25 percent of the student population through these different modalities.

- The Counseling Center administers a satisfaction survey to understand areas of strength, as well as how to improve delivery of services.

Lessons Learned

- **Implement active partnerships between college administrations and counseling centers on new initiatives and programming**. Many campus committees can benefit from having a representative from the Counseling Center. Administrators can also help disseminate information about mental health services through their social media channels and department websites.

- **Empower students to make their own choices about their mental wellness.** A stepped care model can provide students the flexibility to decide how they want to engage with self-care, psychoeducation, and treatment.

- **Assess the environment of the Counseling Center.** The therapeutic process begins when students enter the center and feel the warmth and openness the staff have for students and one another. Through their interactions with one another, counselors can demonstrate honesty, respect for oneself, and respect for others.

- **Increase the visibility of counseling services.** Mental health concerns have historically carried a stigma in many communities of color, negatively impacting students' comfort with seeking mental health services. The Counseling Center distributes an e-newsletter to the campus community, providing psychoeducation to support awareness of mental health concerns, ways to prevent or cope with mental health stressors, and the availability of counseling services. Clinicians are available for student events and academic sessions, collaborating with other departments and registered student organizations.

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STAND at University of California, Los Angeles and East Los Angeles College

Screening and Treatment for Anxiety & Depression (STAND) is a multi-tiered system of care that leverages digital technologies. STAND was originally developed by Dr. Michelle Craske and implemented at University of California, Los Angeles (UCLA). After three years of implementation at UCLA, the program was adapted to serve the students at East Los Angeles College (ELAC). STAND is a standalone program serving both campuses and is separate from the schools' respective counseling centers. There are plans to work toward increasing integration at both campuses.

STAND consists of four steps, from screening to treatment:

- **Step 1**: Newly participating students complete a five-minute online survey that measures symptoms of anxiety, depression, and suicidal thoughts and behaviors. Feedback is available within minutes, informing respondents of their symptom levels.

- **Step 2**: Students are triaged to three tiers of care based on their level of need.

- **Step 3**: At all tiers, students participate in continuous monitoring of their symptoms through weekly online surveys with 24/7 outreach provided when elevated suicide risk is endorsed (see below).

- **Step 4**: As symptoms improve or worsen, the online STAND alerts personnel to consider reassignment of the student to the appropriate tier and recommends next steps.

Symptom Level	Student Need	Treatment
Little to None	Low	Online prevention skills training program
Mild to Moderate	Medium	Self-guided online Cognitive Behavioral Therapy in conjunction with coaching support from trained peers
Severe	High	Intensive clinical care

University of California, Los Angeles (UCLA)

Location

West

Type

Large public university (31,000 undergraduate students; 14,000 graduate students)

Demographics

- 28% Asian American; 27% White; 22% Hispanic/Latino; 12% international students

- More than one-third of undergraduates are first generation college students

Evidence-Based Practice

Online CBT

East Los Angeles College (ELAC)

Location

West

Type

Community college (approx. 35,000 for-credit students)

Demographics

- 64% Hispanic/Latino; 9% Asian American; 6% White; 5% Black

- 68% of student body are younger than 25 years old

Evidence-Based Practice

Online CBT

Related Resources

UCLA STAND at ELAC

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Features and Elements of the Approach

- **Symptom monitoring:** The STAND interface collects data through weekly symptom monitoring and continually evaluates the need for tier re-assignment.

- **Online coach-supported therapy:** This is available for individuals at the middle tier. After determining the student's specific problem areas, the program recommends a set of self-guided modules for personalized treatment.

- **CBT-based modules:** STAND online therapy includes over 20 CBT-based modules on various topics, including sleep, worry, and self-compassion.

- **Follow-up meetings with a peer coach:** The online therapy program includes virtual follow-up meetings with a peer coach. Peer coaches are fellow students who undergo training in interpersonal process and motivational techniques, ethics, and the evidence-based skills that comprise the online content.

- **Clinical supervision:** Clinical staff provide supervision during peer coaching sessions and can step into a session to offer the student additional support if needed.

- **Crisis prevention:** Immediate help for crisis prevention is available to the students if they report suicidal thoughts or behaviors in the online symptom tracking survey; an automatic alert is sent to the crisis prevention team, which follows up with the student within hours.

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Implementation of STAND Program at the Two Campuses

As the STAND program at UCLA completed three years of implementation, an adapted version began at ELAC, with UCLA overseeing the implementation. As UCLA and ELAC differ in institution type and characteristics of the student body, several modifications were made for STAND at ELAC, described in the table below.

Program element	Original implementation at UCLA	Modified implementation at ELAC
Partnerships to provide clinical care at the highest tier	STAND at UCLA partnered with numerous campus departments to facilitate recruitment and referrals but developed their own team of psychology trainees and psychiatry residents overseen by licensed supervisors to deliver the intensive treatment. The goal is to integrate the STAND program with the existing counseling center in the future.	STAND at ELAC is a partnership among the two colleges and the Los Angeles County Department of Mental Health (DMH). As a community college, ELAC does not have as many on-campus resources as a large residential college like UCLA. Thus, for students at the highest tier, clinical care is delivered by DMH rather than on-campus providers. DMH conducts an intake and assigns the student to a therapist for a collaborative functional assessment and a course of therapy utilizing evidence-based interventions for their specific problem areas.
Number of students served	There is no cap on the number of students involved in the STAND program at UCLA.	STAND at ELAC is currently implemented via a demonstration project that will treat a total of 560 ELAC students. The program will be refined and expanded in subsequent years.
Co-existing physical and socioeconomic needs	When students exhibit physical and socioeconomic needs, such as food security and safety of the living environment, in addition to mental health needs, STAND at UCLA refers students to internal resources for social services, legal assistance, and other kinds of support.	STAND at ELAC utilizes on-campus social work case management to refer students to community resources for their physical and socioeconomic needs.
Volunteer coaches for second tier of the program	UCLA has trained over 500 volunteer peer coaches.	The ELAC STAND program hired 40 students to serve as paid peer coaches. While these coaches are undergoing training, UCLA has provided volunteer peer coaches to serve the ELAC program.

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Ongoing Assessments

- During the three years UCLA implemented the STAND program:
- More than 7,300 UCLA students completed symptom screening.
- 3,500 students were offered treatment.
- Over 1,300 risk alerts indicating suicidal thoughts and behaviors or severe depression among UCLA students were received and responded to by the crisis prevention team.
- Over 500 volunteer peer coaches were trained.
- The ELAC program currently serves 560 students across all three tiers and has hired 40 paid peer coaches, who are currently undergoing training.

Lessons Learned During Modified Implementation

- **Setting up a program with significant technological components takes time and resources.** When implementing STAND at ELAC, many months were needed to coordinate the IT systems and security considerations among UCLA, ELAC, and DMH. The project would have benefited from full-time IT staff devoted to setting up the program.

- **Online coach-supported therapy is effective, but it is challenging to get students to initiate it.** Many students who were offered the program never initiated it or dropped out after a single session. Based on these data, the STAND developers made changes for the ELAC implementation. The modified version includes content that is more personalized to the symptoms of the student, more interactive, and more culturally responsive.

- **Publicizing a new program at a new college is challenging, especially with the remote learning model.** The UCLA and ELAC staff working on the implementation of the program at ELAC knew that there would be challenges getting buy-in for a program like STAND, given that it was developed and implemented by an outside university, no such program existed on the campus before, and mental health stigma is prominent among the campus community. The team utilized numerous focus groups of ELAC students and consultation with experts to make sure the program was perceived as relevant, helpful, and welcoming to the ELAC community. In addition, in light of the COVID-19 pandemic, the developers pivoted to online/digital versions of the earlier planned promotional activities.

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University of Massachusetts Amherst

The Center for Counseling and Psychological Health (CCPH) at the University of Massachusetts (UMass) Amherst serves about 3,500 students, or 11 percent of the total student body. CCPH consists of psychologists, social workers, clinical social workers, psychiatrists, a registered nurse, and a psychiatric nurse. CCPH provides comprehensive care, including clinical services, psychiatry, outreach, training, and assessment. CCPH also provides brief psychotherapy and has a number of clinicians trained in Dialectical Behavior Therapy.

In addition to formal appointments with the clinicians at the Center, students can also register for "Let's Talk," which offers a free, confidential, and informal consultation session on any mental health topic. Let's Talk sessions allow students to share their thoughts or feelings, gain support, and get recommendations for next steps. Let's Talk is a service provided as part of the stepped care model, with community conversations, workshops, groups, brief individual therapy, and crisis intervention being the other services in the model.

One of CCPH's defining features is its suicide prevention training. An adaptation of Syracuse University's Campus Connect program, this gatekeeper training consists of two parts. First, participants complete an online portion which provides general information on perceptions of suicide and distress on campus. Equipped with this knowledge, participants then take part in a two-hour live training the following day. In this interactive session, they role-play scenarios and practice how to listen actively and direct distressed individuals to the appropriate resources.

CCPH provides the gatekeeper training to many campus partners, including Academic Advising, the Dean of Students Office, and student-run organizations. Residence Education also requires all resident assistants and peer mentors to participate in the training every year.

The promotion of mental health at UMass Amherst extends beyond the services at CCPH. The Center for Health Promotion (CHP) is another critical resource in supporting the health and well-being of students. Located in the University Health Services, CHP utilizes

Location
Northeast

Type
Large public university (approximately 31,600 undergraduate and graduate students)

Demographics
- 31% of undergraduates are students of color
- 21% of entering first-year class are first-generation college students
- 26% of graduate students and 7% of undergraduates are international

Evidence-Based Practices
Gatekeeper Training

Related Resources
Center for Counseling and Psychological Health homepage

Center for Health Promotion homepage

staff and peer educators to teach students about various issues, including sexual health and alcohol and drug use. CHP raises awareness across the campus through newsletters and classroom visits.

Additionally, UMass Amherst has made mental health instruction a part of their curriculum. The University now offers for-credit courses such as *Positivity and Relaxation Training,* developed at Mass General Hospital, and *Changing Minds, Changing Lives*, a resilience and strengths-based course developed at the UMass Amherst School of Nursing.

Features and Elements of the Approach

- **Suicide Prevention Training:** This is a two-part gatekeeper training with an online component and a two-hour live interactive session with role-play.
- **Managing Emotions:** This is a free skill-building workshop based on DBT principles.
- **Let's Talk:** This initiative includes informal confidential chats with a counselor-consultant.
- **24/7 Crisis Services:** Crisis services include rapid assessment and intervention.

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- **Psychiatric Consultations:** Consultation from CCPH psychiatric providers and follow-up appointments for monitoring response to medication are available, often in conjunction with ongoing psychotherapy.

- **Peer Health Education Program:** Internship is offered to students who wish to promote health and well-being and advocate on behalf of the student body. Peer educators also assist with the Paws Program, which brings therapeutic animals to campus for stress relief.

- **Fresh & Sober:** This is a program that provides an anonymous space and a non-judgmental support network for students in recovery from substance use. Staff trained in motivational interviewing skills and techniques assist students in exploring their substance use and next steps toward accessing appropriate referrals.

- **Mental Health as a Part of the Curriculum Through the Two Courses:** These courses are - *Changing Minds, Changing Lives*, a resilience and strengths-based curriculum incorporating the Strengths Finder, free-writes and sharing in small groups, and mindfulness practices and *Positivity and Relaxation Training*, a course that helps students develop a self-care routine to help manage stress, improve their outlook, and enhance the quality of their life.

Ongoing Assessments

- UMass Amherst participates in nationwide population studies, including the Healthy Minds Study and the National College Health Assessment (from the American College Health Association). UMass also provides aggregate data to the Center for Collegiate Mental Health to inform the continual updating of the Counseling Center Assessment of Psychological Symptoms and further the study and understanding of college student mental health.

- A recent study on *Changing Minds, Changing Lives*[1] with a sample of student athletes found that the intervention group reported greater resilience and lower perceived stress than the control group.

Lessons Learned

- **Make gatekeeper training widely available.** The gatekeeper training should be made available to campus partners and required of key personnel, such as resident assistants. Suicide prevention is about broad connections and collaboration, not just times of crisis.

- **Utilize online modules prior to live training**. CCPH initially had difficulty engaging faculty, staff, and students to commit the time needed to complete the entire suicide prevention training. By creating the online portion, CCPH was able to shorten the live session while also increasing engagement, as participants had time to process the content beforehand.

- **Increase visibility**. Both CCPH and CHP staff strive to have a campus presence by visiting classes and attending social events to get to know students. They have also collaborated with faculty in various ways, including providing class presentations on mental health and well-being, offering guidance on syllabus statements, and providing a list of wellness resources to display at the beginning of each class.

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Reference List

[1] Chandler, G. E., Kalmakis, K. A., Chiodo, L., & Helling, J. (2020). The efficacy of a resilience intervention among diverse, at-risk, college athletes: a mixed-methods study. *Journal of the American Psychiatric Nurses Association, 26*(3), 269-281. https://doi.org/10.1177/1078390319886923

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Resources for Evaluation and Quality Improvement

Evaluating a program can answer critical questions about how well an intervention has been implemented and determine what may or may not be working. Evaluation can also show how individuals benefit from the intervention. This information can be helpful in making implementation adjustments, if necessary, and demonstrating the value of that intervention to justify its continuation and secure additional funding. In addition, stakeholders can use information gathered through evaluation to encourage implementation of that intervention in other settings or communities.

This chapter provides an overview of approaches to evaluate implementation of and outcomes from interventions to prevent or treat college students' mental health concerns. Ideally, as a result of the intervention, students experience improved mental health.

College administrators, treatment providers, and students should be engaged in the generation of evaluation tools and plans to ensure that data collection tools are appropriate for the evaluated participants and to secure buy-in. Reporting findings back to providers and the campus community should be prioritized to promote transparency and inform care choices.

This chapter focuses on evaluation strategies for college mental health interventions, such as those discussed in Chapter 2. The chapter includes information on implementing a continuous quality improvement (CQI) process and an outcome-focused evaluation. Further,

it provides specific evaluation resources, including potential outcomes to track.

Types of Evaluations

Researchers may conduct evaluation activities before an intervention is implemented to determine its feasibility (*formative evaluation*), during implementation (*process evaluation* and *Continuous Quality Improvement (CQI)*), and after the treatment has been delivered to at least one client (*outcome and impact evaluations*). All four types of evaluation provide information about different aspects of the practice's effectiveness.

Qualitative and quantitative data are complementary. Each provides critical insight into if and how the intervention is operating and achieving the intended objectives.

Qualitative data include any non-numeric, text-based information, such as verbal, visual, or written data. Qualitative data collection methods include interviews, focus groups, clinical observations, gathering data from documents and images, and open-ended survey questions and polling responses.

Quantitative data are any numeric data that can be processed by mathematical or statistical analysis. Quantitative data collection includes close-ended survey questions and polling responses, services and utilization data, and claims and encounter data.

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EVALAUTION PLAYS CRITICAL ROLES AT DIFFERENT TIMES DURING THE IMPLEMENTATION OF AN INTERVENTION ON A COLLEGE CAMPUS

During the development of the program, prior to full-scale implementation

Formative Evaluation
- Is the intervention the right one for college students?
- What resources does the college have and need to implement and evaluate the intervention?

Throughout the implementation of the intervention

Process/Implementation Evaluation
- Are intervention activities being implemented as intended?
- What are the barriers and facilitators to implementation?

Continuous Quality Improvement
- What improvements could be made to the intervention?
- What parts of implementation are working and should be unchanged?

After the intervention is initiated with at least one client

Outcome/Effectiveness Evaluation
- Were the objectives of the intervention achieved?
- Does students' mental health improve after they start participating in the intervention?

At appropriate intervals throughout and at the end of the intervention implementation

Impact Evaluation
- To what extent can student outcomes be attributed to the intervention activities?

Engage college community including campus administrators, faculty, staff, parents, and students throughout all phases of evaluation planning, data collection, analysis, and dissemination.

Preparing to Collect Data

The following steps can help clinics and practitioners prepare to collect and analyze data:

1. **Determine if the purpose of the data collection is evaluation or research.**

   Qualitative and quantitative evaluation and research enable administrators and clinicians to learn from students and obtain the perspective of those with lived experiences. Both evaluation and research can also involve collecting data from staff who deliver the treatment to obtain their perspectives on facilitators and challenges to implementation.

   While program evaluation supports program improvement, research systematically follows study protocols to develop generalizable knowledge. Research requires protocol and procedure approval by an Institutional Review Board (IRB) to adhere to human subject research protections. An IRB is a committee that applies research ethics by reviewing the methods proposed for research to ensure they are ethical. Most program evaluations and quality improvement projects do not require IRB approval, but administrators/researchers should consult with their institutions during evaluation design to ensure they are following appropriate data collection procedures.

2. **Determine outcomes of interest.**

   A challenging step in the process of implementing new interventions is to determine whether they have previously yielded desired outcomes. An outcome is the change a program plans to accomplish through the implementation of an intervention. Evaluations exist across a continuum, from tracking staff activities, number of students receiving an intervention, and student no-shows, to conducting student satisfaction surveys and comparing mental health outcomes between students receiving different treatment options. College counseling centers conducting evaluation or research should engage stakeholders from within the campus community to identify appropriate processes and metrics to assess outcomes.

3. **Identify team members to conduct evaluation activities and capacity to conduct evaluations.**

   Regardless of the type of research or evaluation conducted, collecting and analyzing data take time. College counseling centers conducting the evaluation need to identify team members who possess the skills to conduct evaluation activities and secure funding for evaluation trainings, data collection, analyses, and reporting.

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Conducting Continuous Quality Improvement

Colleges might want or need to introduce and adapt new treatment practices to meet the mental health needs of an evolving student population. Continuous quality improvement (CQI) can be used to systematically identify, document, and analyze barriers and facilitators to implementation, making it an important tool for improving outcomes.

Process and Outcome Measures

One of the final important, but often challenging, steps in the process of implementing and evaluating programs is to determine whether they have yielded desired outcomes. An outcome is the change a program accomplishes through the implementation of an intervention. While less-rigorous research methods can be used to assess the process outcomes, rigorous study designs, such as randomized controlled trials, that involve the use of a control group, are required for assessing intervention impact.

The table below provides a list of potential outcomes, illustrative outcome indicators, and data sources that campus administrators, practitioners, and others may use to evaluate interventions, such as those identified in Chapter 2. Student health outcomes may be tracked at baseline and throughout the program duration through standardized screening or through interviews with practitioners and students. Implementation outcomes, such as engagement and retention in services may be obtained through administrative data, surveys, or interviews. Provider outcomes may be captured through surveys or interviews. Overall campus health outcomes may be tracked through administrative data and interviews.

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Evaluations Include a Variety of Process and Outcomes Measures

Illustrative Measure	Illustrative Indicators	Illustrative Data Sources
Process Measures		
Treatment engagement	• Increased student engagement in the treatment • Increased number of student referrals • Increased student service utilization rates	• Qualitative interviews • Student self-report • Intake/administrative data
Treatment retention	• Decreased student no shows or cancellations • Increased number of students completing treatment	• Attendance/administrative data
Student satisfaction	• Increased access to care • Increased acceptability of care • Increased self-efficacy • Improved therapeutic relationship with provider	• Qualitative interviews • Structured scales/assessments (e.g., Client Satisfaction Questionnaire, Satisfaction With Therapy and Therapist Scale, Working Alliance Inventory short form)
Short-Term and Intermediate Outcome Measures		
Reduction in depression symptoms	• Days with symptoms in the prior 30 days • Reduced severity of symptoms • Student's improved daily functioning and sleep quality • Increased enjoyment of activities • Reduced feelings of helplessness and hopelessness	• Client self-report • Structured scales and assessments (e.g., Beck Depression Inventory – 2nd Edition, Structured Clinical Interview for DSM-5, Hamilton Depression Rating Scale (HAM-D), Center for Epidemiological Studies - Depression Scale (CES-D), Patient Health Questionnaire-9 (PHQ-9))
Reduction in anxiety symptoms	• Days of symptoms in the prior 30 days • Reduced severity of symptoms • Improved socialization	• Client self-report • Structured scales and assessments (e.g., Beck Anxiety Inventory, Four Dimensional Anxiety Scale, State-Trait Anxiety Inventory (STAI))
Reduction in suicidal thoughts or behaviors and reductions in non-suicidal self-injury	• Reduced or absence of suicidal ideation and self-harm • Reduced emergency department visits and hospitalizations	• Client self-report • Structured scales and assessments (e.g., Non-Suicidal Self-Injury Assessment Tool (NSSI-AT), Columbia Suicide Severity Risk Scale) • Electronic health record data
Improvements in educational/ personal achievement and attainment	• Attainment of student's personal and educational goals • School achievement	• Client self-report • Overall GPA • Degree/certificate attainment

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Illustrative Measure	Illustrative Indicators	Illustrative Data Sources
Long-Term Individual Outcome Measures		
Reduction in mental health concerns and co-occurring substance use disorders	• Reduced number of completed/attempted suicides and/or overdose • High return rates after medical leave • Decrease in students leaving for mental health reasons • Decrease in crisis interventions	• Client self-report • Student records and administrative data • Hospital and medical facility administrative data
Improvements in educational achievement and attainment	• Attainment of student's personal goals for education	• Client self-report • Grade promotion/retention • Graduation or dropout status • Degree/certificate attainment • Employment status at graduation
Population-Level Impacts		

Reduction in mental health concerns among college students	• Reduced prevalence of mental health concerns among college students
	• Rates of hospitalizations and medical leave related to:
	  – Attempted suicides
	  – Mental and substance use disorders
	  – Reduced rate of suicides among college students
		• Large-scale national surveys
		• Student records and administrative data
		• Hospital and medical facility administrative data

Improvements in educational achievement and attainment	• Attainment of educational goals • Increased student graduation rates • Reduced student dropout rates • Increased graduate employment rates	• Campus-wide surveys • Student records and administrative data • Alumni surveys
Improvements in campus community mental health knowledge	• Increased community-wide mental health knowledge • Increased knowledge of campus resources among students • Increased likelihood of students and staff to intervene/refer at-risk students	• Campus-wide surveys (students and faculty/staff)

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CONTINUOUS QUALITY IMPROVEMENT (CQI)

What is CQI?

CQI involves a systematic process of assessing program or practice implementation and short-term outcomes and then involving program staff in identifying and implementing improvements in service delivery and organizational systems to achieve better treatment outcomes. CQI helps assess practice fidelity, the degree to which a program delivers a practice as intended. There are many potential CQI models and approaches (e.g., https://www.healthit.gov/faq/what-are-leading-continuous-quality-improvement-strategies-health-care-settings).

CQI differs from process evaluation in that it involves quick assessments of program performance, timely identification of problems and potential solutions, and implementation of small improvements to enhance treatment quality. CQI is usually conducted by internal staff. Process evaluation involves longer-term assessments and is best conducted by an external evaluator.

The Institute for Healthcare Improvement's PDSA Model for Improvement identifies a scientific method for testing small-scale changes in an action-oriented, cyclical manner. The stages are: planning it (Plan), trying it (Do), observing the results (Study), and acting on what is learned (Act).

Why use CQI?

CQI takes a broad look at the systems in which programs or practices operate. Because of the pivotal role it plays in performance management, institutions beginning to implement new mental health programs for college students are encouraged to implement CQI procedures.

What are the steps involved in CQI?

Although steps in the CQI process may vary based on objectives, typical CQI steps include:

- Identify a program or practice issue needing improvement and a target improvement goal

- Analyze the issue and its root causes

- Develop an action plan to correct the root causes of the problem, including specific actions to be taken

- Implement the actions in the action plan

- Review the results to confirm that the issue and its root causes have been addressed and short-term and long-term treatment outcomes have improved

- Repeat these steps to identify and address other issues as they arise

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act | Plan
Study | Do
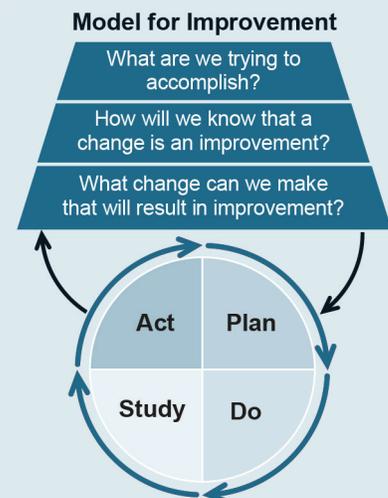
Institute for Healthcare Improvement. (n.d.). *Science of improvement: Testing changes.* http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx

New Jersey Department of Children and Families. (n.d.). *Five Stages of Continuous Quality Improvement.* https://www.nj.gov/dcf/about/divisions/opma/CQI%20framework.pdf

U.S. Department of Health & Human Services Office of Adolescent Health. (n.d.). *Continuous Quality Improvement, Part 1: Basics for Pregnancy Assistance Fund Programs.* https://www.hhs.gov/ash/oah/sites/default/files/cqi-intro.pdf

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Evaluation Resources

Evaluating Programs

- [A Framework for Program Evaluation](#) from the Program Performance and Evaluation Office at the Centers for Disease Control and Prevention summarizes essential elements of program evaluation.
- [The Community Toolbox](#) from Center for Community Health and Development at the University of Kansas includes [a step-by-step guide](#) to developing an evaluation of a community program, specific tools, and examples.

Evaluating Program Sustainability

- Center for Public Health Systems Science at the Brown School at the Washington University in St. Louis has developed a [Program Sustainability Assessment Tool (PSAT)](#) and a [Clinical Sustainability Assessment Tool (CSAT)](#) to measure progress towards sustaining new implementation efforts.

Quality Improvement and Continuous Performance Monitoring

- Institute for Healthcare Improvement's [Quality Improvement Essentials Toolkit](#) includes the tools and templates to launch a quality improvement project and manage performance improvement.
- The [NIATx](#)'s model of process improvement is available specifically for behavioral healthcare settings to improve access to and retention in treatment.

Evaluating Mental Health Programs on College Campuses

- Based on their experience evaluating a series of prevention and early intervention (PEI) programs implemented by the California Mental Health Services Authority (CalMHSA), the RAND Corporation developed a [guide to evaluation approaches](#) including key steps, potential evaluation designs, and data collection methods.

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Appendix 1: Acknowledgments

Appendix 2: Evidence Review Methodology

The authors followed a rigorous, systematic evidence review process in the development of this guide: This appendix provides an overview of the evidence review methodology used to identify the ratings for the behavioral interventions included in the guide: Gatekeeper trainings, Mindfulness-Based Stress Reduction (MBSR), Acceptance and Commitment Therapy (A&CT), Cognitive Behavioral Therapy (CBT), and Dialectical Behavior Therapy (DBT).

Reviewers, in coordination with SAMHSA and experts, conducted a four-step process to select interventions, identify related studies, review and rate studies, and identify treatment ratings.

Step 1: Intervention Selection

The authors identified interventions after a review of the literature and in consultation with subject matter experts. In an effort to include interventions that would be most useful on college campuses, interventions were required to meet the following criteria to be eligible for selection:

- Be clearly defined and replicable
- Address the target outcomes of reduction in anxiety, depression, and suicidal thoughts and behaviors among college students
- Be currently implemented in the field
- Have studies of their effectiveness
- Have accessible implementation and fidelity supports

At the conclusion of this step, SAMHSA and the guide's Expert Panel reviewed the proposed interventions identified by the authors and agreed on the five mentioned above for inclusion in the evidence review and rating process.

Step 2: Study Identification

Once the interventions were identified, the reviewers conducted a comprehensive review of published research on these interventions to identify studies of the selected treatments. This review only included studies from eligible sources (i.e., peer-reviewed journals and government reports) that avoid conflicts of interest. The reviewers documented all potential studies identified through the literature search.

The studies identified in the literature search varied in type and rigor, so the reviewers assessed them further for inclusion in the evidence review. To be eligible for review and study rating, research studies had to:

- Employ a randomized or quasi-experimental design, or
- Be a single sample pre-post design or an epidemiological study with a strong counterfactual (a study that analyzes what would have happened in the absence of the intervention)

Literature reviews, descriptive, implementation studies, and meta-analyses were not included in the review, but were documented to provide context and identify implementation supports for the interventions.

Additionally, to be eligible for further review and rating, studies had to:

- Be published or prepared in or after 2000
- Be publicly available via peer-reviewed or research reports
- Be available in English
- Include at least one eligible outcome related to anxiety, depression, or suicidal thoughts and behaviors in college students
- Have a comparison/control group that is treatment as usual, or no/minimal intervention if using a randomized experimental or quasi-experimental design

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Step 3: Study Review and Rating

Next, trained reviewers assessed each study to ensure that the methodology was rigorous and therefore could demonstrate causation between the intervention and the identified outcomes. Reviewers analyzed and documented each study to ensure:

- Experimental and comparison groups were statistically equivalent, with the only difference being that participants in the experimental group received the intervention and those in the comparison group received treatment as usual or no/minimal intervention.
- For randomized experiments with high attrition and for quasi-experimental designs, baseline equivalence was established between the treatment and comparison groups.
- For randomized experiments, randomization was not compromised. For example, ensuring that reassignment of treatment status, usually made to balance the distribution of background variables between treatment and control groups, did not occur.
- Study did not have any confounding factors (factors that affect the outcome but are not accounted for by the study).
- Missing data were addressed appropriately:
  - Imputation based on surrounding cases was considered valid
  - Complete case analysis was considered valid and accounted for as attrition
  - Using model with dummy for missing as a covariate was considered valid
  - Assuming all missing data points are either positive or negative was not considered valid
  - Regression-based imputation was considered valid; mean imputation was not considered valid
- Outcome measures were reliable, valid, and collected consistently from all participants.
- Valid statistical models were used to estimate impacts.
- Interventions demonstrated improved outcomes related to anxiety, depression, or suicidal thoughts and behaviors among college students.

Based on these study design and study characteristics, reviewers **gave each study a rating** for causal impact. Reviewers used the following scoring metric for each study based on the eight factors above to determine if a study is rated:

- High support of causal evidence
- Moderate support of causal evidence
- Low support of causal evidence

Only randomized controlled trials, quasi-experimental designs, and epidemiological studies with a strong comparison group were eligible to receive a high or moderate study rating.

Step 4: Treatment Rating

After all studies for an intervention were assessed for these criteria, the reviewers **gave each intervention a rating**, based on the number of studies with strong, moderate, or emerging support of causal impact. Causal impact is evidence demonstrating that an intervention causes, or is responsible for, the outcome measured in the study's sample population. The intervention was placed into one of the following categories based on the level of causal evidence of its studies:

- **Strong Evidence**: Causal impact demonstrated by at least **two** randomized controlled trials, quasi-experimental designs, or epidemiological studies with a high or moderate rating.
- **Moderate Evidence**: Causal impact demonstrated by at least **one** randomized controlled trial, quasi-experimental design, or epidemiological study with a high or moderate rating.
- **Emerging Evidence**: No study received a high or a moderate evidence rating. The intervention may have been evaluated with less rigorous studies (e.g., pre-post designs) that demonstrate an association between treatment and positive outcomes, but additional studies are needed to establish causal impact.

The four-step process described above resulted in identification and rating of the five interventions with strong/moderate evidence for reducing anxiety, depression, or suicidal thoughts and behaviors among college students. The rating given to each intervention is intended to inform decision making about adoption of new practices or clinical or system enhancements whose use will improve outcomes for college students with mental health concerns.

Photos are for illustrative purposes only.
Any person depicted in a photo is a model.

SAMHSA

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