

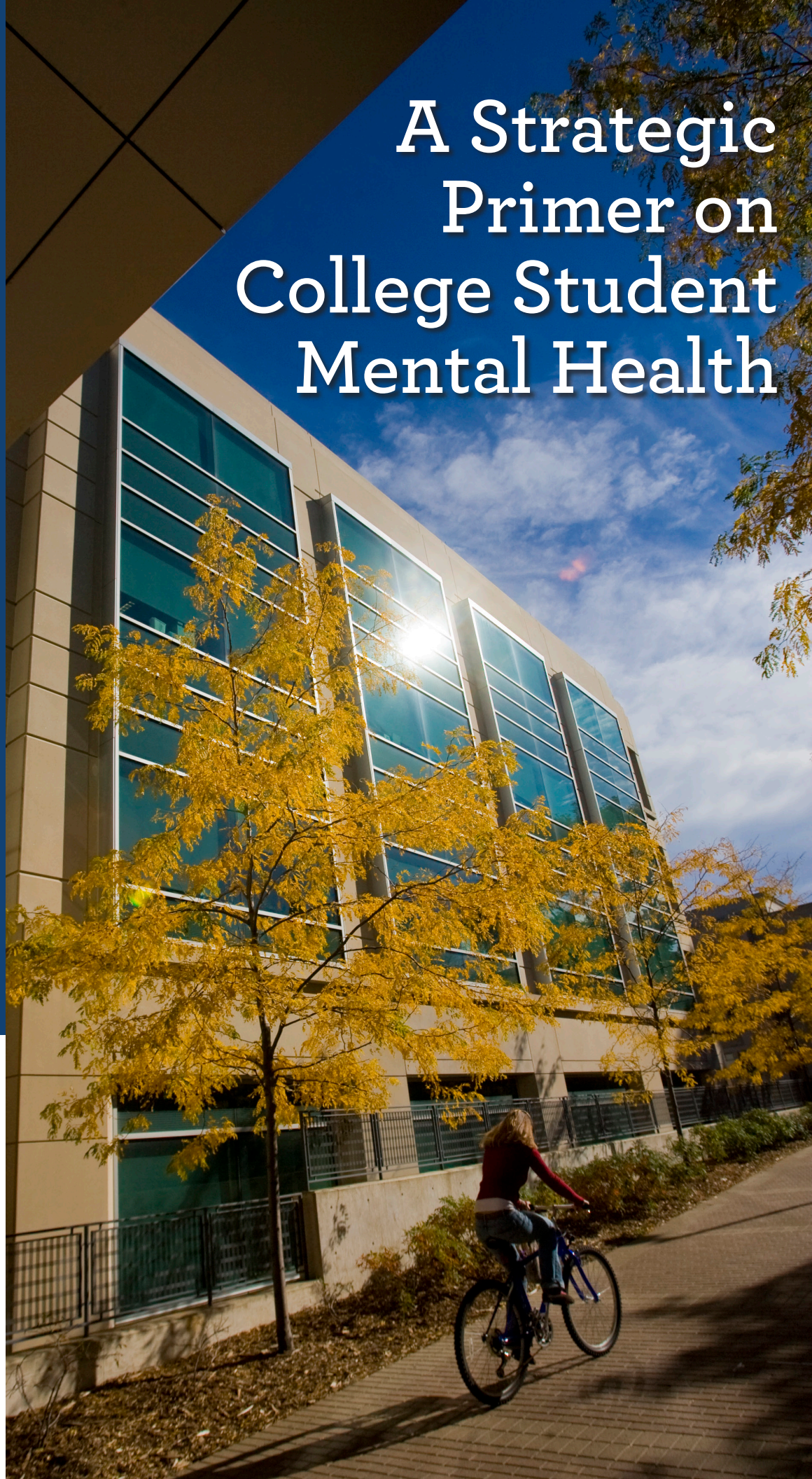
# A Strategic Primer on College Student Mental Health

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This report is the product of a year-long partnership between NASPA: Student Affairs Administrators in Higher Education, the American Council on Education, and the American Psychological Association focusing on student mental health issues. Responding in part to President Obama's call to launch a national conversation to increase the understanding and awareness about mental health, the partnering organizations, in collaboration with the lead authors, advisory committee, editorial group, and the organizations and institutions they represent, reviewed trends in college student mental health and sought out examples of practice that contribute to student well-being. We know that mental health continues to impact students in course learning and campus engagement. It is our collective hope that through increased awareness and collaboration, institutions of higher education can continue to serve all students and support their learning and development.

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## ABOUT SIDEBARS: College Student Mental Health

Throughout the document we have highlighted specific examples from individual institutions, effective models used by a variety of types of institutions, and nationally coordinated approaches that are student sponsored and student led. We have also chosen to call out common myths about mental and behavioral health as well as provide resources for what works in addressing several specific issues on the campus.

We want students to learn and grow during college. Parents, employers, and the public expect that college graduates will have acquired knowledge and certain qualities, skills, and abilities, including cognitive, career, and practical competencies. They will demonstrate competency in critical thinking, communication, teamwork, resiliency, and problem solving. They will be committed to personal and social responsibility, intercultural competency, and civic engagement, and possess the ability to apply learning across multiple fields and in many dimensions (Association of American Colleges and Universities 2007). A graduate who has developed those qualities is ready for success in life and work.

The kind of learning that helps students achieve those outcomes is not just memorization, and it takes more than simply sitting in class or cramming for tests at the last minute. True higher learning demands a lot of students—it demands real and sustained engagement with learning experiences inside and outside the classroom. To take full advantage of the opportunity of higher education, students have to do far more than just show up.

## Mental and Behavioral Health Problems Are Learning Problems

Given what it takes to be successful in higher education—and later, in life and work—students have to be *ready to learn*—in a state of physical, psychological, emotional, intellectual, social, and spiritual well-being. Mind, brain, and body must be in shape for and open to learning experiences. How prepared students are for learning determines how much and how well they learn, and influences persistence, retention, and graduation. We want every student who starts college to graduate, and every graduate to experience all that higher education can offer—so we must pay attention to students’ well-being.

Learning is the outward evidence of changes that happen in the microscopic anatomy and functioning of the brain in response to new information acquired through a variety of learning experiences. The overall state of an individual’s health affects the ability of his or her brain to create or modify connections and networks among neurons, which is the critical first step in learning. Factors that influence any aspect of well-being can affect the state of brain—and therefore the state of mind—of learners. Mental health problems (notably stress, anxiety, and depression) and harmful health behaviors such as substance abuse can impair the quality and quantity of learning. They decrease students’ intellectual and emotional flexibility, weaken their creativity, and undermine their interest in new knowledge, ideas, and experiences. Mental and behavioral health problems are also learning problems.

For example, what we often observe in students who are depressed—flattening of their interest, affect, appetite, attention, and motivation, along with difficulty sleeping or concentrating—is mirrored in the findings of brain science. Depression, which is a frequent and significant challenge among college and university students, reduces the brain’s ability to enhance or expand networks of neurons, and good treatment of depression can reduce those losses. Depression is also associated with significant decreases in the brain’s response to stimuli that should prompt learning, and anxiety, depression, and mixed anxiety and depression all impair memory. Researchers have documented both functional and structural effects of depression in the brain, including suppressed activity in areas that are responsible for the formation of new memories. Depression makes the brain less efficient: more brain resources must be mobilized and utilized for any given task than is true in people who are not depressed. Academics suffer.

## The Engelhard Project for Connecting Life and Learning

The Engelhard Project at **Georgetown University (DC)** is a curriculum infusion model connecting health and well-being issues with the intellectual content of traditional courses. It integrates health and personal issues into the learning experiences of students. Faculty assign focused readings and reflective writing assignments, and invite health professionals to join classroom discussion. Examples include a math modeling course focused on blood alcohol levels and risks to student health and decision making, and a foundational biology course focused on genetic predispositions to mental health issues which encourages students to make connections to the biological and physio-emotional underpinnings of mental health. To date, it has incorporated over 225 courses, 7,500 students, 66 faculty, and 28 health-care professionals.

For more information, please visit [cndls.georgetown.edu/engelhard/featured-faculty](https://cndls.georgetown.edu/engelhard/featured-faculty).

Students who are depressed can be expected to learn less, not to learn as well, and to learn more slowly than their peers. Data from several postsecondary-based studies show the academic consequences: depressed students, whether male or female, and whether they are undergraduates or graduate students, have lower grade point averages (GPAs) and blunted levels of academic persistence and achievement compared with their peers who are not depressed. Those effects are compounded for students with mixed anxiety and depression. About 70 percent of the students who use counseling services at their college or university report that their personal problems have had an impact on their academic performance, and 20 percent have considered withdrawing from school because of those problems. Social and emotional adjustment difficulties predict attrition as well as, or better than, academic adjustment difficulties.

The academic consequences of excessive alcohol consumption are also strikingly negative. More frequent and intense drinking is associated with significant reductions in academic performance. The use of other drugs can also undermine academic success; students who use marijuana in a chronic, heavy pattern throughout all four years of college are twice as likely as minimal users to have discontinuous enrollment or episodic enrollment patterns throughout their college experience.

A key component of well-being is resilience—the ability to recognize, face, and manage or overcome problems and challenges, and to be strengthened, rather than defeated, in the process. A resilient person copes with trouble or trauma and bounces back. Resilience protects psychological well-being and is an indicator of its presence. Learning experiences of all kinds, from academic courses to student employment, help students develop this ability to deal with stress and adversity in mature and healthy ways. Resilient graduates better navigate today's uncertain and volatile economic, employment, and career environments. Challenges to health and well-being undermine resilience by amplifying the scope and scale of life problems with which students must cope. Less resilient students take fewer intellectual and creative risks; they are poor partners for other students in group learning situations. Challenges to well-being, resilience, and readiness to learn are mutually reinforcing; resilient students learn more and better, and graduate as more prepared and adaptable workers and citizens.

Recognizing that mental and behavioral health problems are also learning problems has important implications. Whether the student is an adult enrolled in a community college, a veteran returning to civilian life at a state college or university, or a freshman adjusting to the rigors of an elite private institution, feeling completely overwhelmed or depressed impedes the learning process. Managing a complex life with many competing demands is hard for all students. Imagine how effectively these students with unrecognized and untreated depression will learn in courses, internships, and leadership development experiences.

Students who may feel “different” and therefore marginalized in the total student population (e.g., by race, ethnicity, sexual orientation, gender expression, country of origin, age, or veteran status) may have even more difficulty reaching out for help from the institution. Providing culturally competent services and active outreach to specific populations is vital to helping all students seek help when needed.

## Peer Counseling and Coaching Programs

Peer services can range from hosting crisis hotlines to educational outreach and primary prevention. **Worcester Polytechnic Institute (MA)** used a Garrett Lee Smith Grant to build the Student Support Network training program, utilizing acceptance and commitment therapy, and promoting psychological flexibility and mindfulness training. **Morgan State University (MD)** started its program in 1972, providing outreach programming and sponsoring rap sessions on stress, relationship issues, and homelessness, as well as sponsoring the Screamfest for Stress. **University of California, San Diego** co-sponsored the Life Coach program, which addresses academic, social, and personal goals. **The Ohio State University** trains Scarlet and Gray Financial peer coaches to address financial health for undergraduate, graduate, and professional students.

## Strengthening Learning Through Attention to Mental and Behavioral Health

**B**etter learning outcomes and higher rates of postsecondary completion will not occur through attention to curriculum and pedagogy alone. The learner matters in the learning, and attention must be paid to every learner's readiness to learn. Colleges and universities cannot ensure high-quality learning—and therefore cannot achieve their mission, accomplish their goals, or serve their valuable social, economic, and civic purposes—without attending to the mental and behavioral health concerns of their students. We cannot effectively educate students or prepare them to be leaders, innovators, and entrepreneurs without responding to the factors that affect their ability to learn. Recognizing and treating anxiety and depression, effectively managing stress and behavioral health problems, and improving the quality of the learning environment can all be expected to strengthen learning outcomes for students of any age and in any context.

The work of college and university health and counseling centers matters a great deal in addressing these critical issues. Though services offered in these health and counseling centers vary depending on institutional type, mission, resources, and student demographics and characteristics, a typical range of services includes rapid initial assessment and triage; individual and group therapy; crisis intervention and postvention; and psychoeducational and population-based prevention programming. Consultation with faculty, staff, families, and peers at both individual and organizational levels is also essential work. While many professionals on campus—student affairs staff, faculty, advisors, and others—have key roles in ensuring student well-being, the counseling center is at the very heart of an institution's work on mental and behavioral health.

Multiple studies have found an increase in student persistence and retention associated with counseling services. Students who participate in counseling report improvements in their satisfaction with their quality of life—a more predictive measure of student retention than GPA alone. But almost two-thirds of students who meet the criteria for depression do not get help, and only about 4 percent of students with a history of alcohol-use disorder in the past year receive services of any kind. One strategy to identify students who may be struggling involves screening in health or counseling-center settings—but screening cannot happen unless students go to health and counseling services (even for unrelated issues) to be detected.

Therefore, many campuses use other forms of intentional, strategic outreach to students who may be on the radar of faculty, police, residence life, or other student life offices after a distressing event or incident. Outreach can be used to check in with the student, assess needs, discuss resources, and make connections to follow-up care as indicated.

The need to provide care for students with serious psychological problems and to ensure safety on our campuses often dominates discussions about mental health in higher education. Campus counseling centers experience high demand and struggle to ensure access, meet clinical needs, and respond effectively to crises. But effective clinical services for students with recognized mental and behavioral health problems will not alone promote learning and create a healthy campus environment. Mental and behavioral health is a critical component of well-being for all students, and having a campus culture and learning environment that supports healthy minds is a core need deeply centered in the mission of every institution of higher education. The best way for colleges and universities to nurture resilience among students is to promote health and well-being, especially mental and behavioral health, at both individual and community levels.

## Active Minds

Active Minds educates students about mental health disorders, encourages help-seeking, promotes positive mental health without shame or stigma, and empowers students to be the driving force to change perceptions and reduce stigma through the development and support of student-led chapters on campuses nationwide. Organized by students on individual campuses across the country, Active Minds now has 400 chapters dedicated to mental health awareness, education, outreach, and advocacy.

For more information visit [www.active-minds.org/index.php](http://www.active-minds.org/index.php).

Difficult and traumatic things will inevitably interfere with college and university life. The death of a student in an accident or from illness, sexual assault and other violence, various natural disasters, alcohol- or drug-related deaths, and suicides or homicides create individual and community trauma. Mental and behavioral health professionals help the victims and the community heal by responding not only to students and others who are immediately affected, but also to their friends and classmates and the community as a whole, with immediate crisis intervention, psychological first aid, and ongoing counseling support.

## Mental and Behavioral Health in College: Enduring and Emerging Issues

There are increasing needs for mental and behavioral health services on college and university campuses for both new students who arrive with documented psychiatric disabilities and other students who are coping with traumatic life issues, stress and anxiety, depression, and emerging mental and behavioral health illnesses. The Center for Collegiate Mental Health (2012), which collects data from more than 120 counseling centers, reports that about half of students who use counseling are new to mental and behavioral health services, but about a third of them have ongoing issues; students who enter postsecondary institutions with diagnosed mental health disorders often have additional challenges with the transition to college or university life.

College is expected to be hard and to create stress. Some level of stress may be motivating to maintain focus and sustain persistence. But overwhelming levels of stress, anxiety, and depression, as evidenced by panic attacks, feelings of hopelessness, and suicidal thoughts, are detrimental to academic performance and success. Data from the 2013 National College Health Assessment II indicate that about one-third of college students across the United States had problems functioning because of depression in the last 12 months; almost half said they had felt overwhelming anxiety in the last year, 20 percent said they had seriously considered suicide in their lifetime, and 5.8 percent said they had attempted suicide. The same survey showed that four of the top five “substantial obstacles to their academic success” were sleep difficulties, stress, anxiety, and depression.

Behavioral health issues such as binge drinking, drug use, cutting and other self-injurious behavior, eating disorders, pornography addiction, and problematic gambling can all be understood as maladaptive strategies to reduce stress and anxiety. Several of those behaviors—notably binge drinking—are reinforced and supported in the social culture of many colleges and universities. Although it is possible that students can self-medicate, and attempt to alleviate unwanted symptoms by turning to substance use, it is also true that substance abuse is frequently associated with negative personal, social, and community consequences, from regretted actions while intoxicated to “hooking up.” Costs to colleges and universities for these behaviors are not limited to the effects on the student who uses; they also include impacts on their communities, property damage, and crime. Alcohol abuse is a major component in intimate partner violence, sexual assault and rape, and suicidal behavior. Substance use disorders and other mental health issues can co-occur, as shown in the National Epidemiologic Survey on Alcohol and Related Conditions.

As noted by numerous sources, the population demographics in the United States are changing. California now has no “majority population,” and the demographics of those attending college are changing as well. When any nation chooses to educate a significant portion of people who are the first in their family to attend college, extra support is needed to nur-



## The BACCHUS Network

The BACCHUS Network, a student-led initiative of NASPA: Student Affairs Administrators in Higher Education, supports groups of undergraduate student peer educators to develop and cultivate a campus culture supportive of effective methods of peer education. Through this support, peer educators and their professional staff advisors are empowered to provide education, promote individual and small group conversations, and make broad environmental changes on campus mental health. BACCHUS Initiatives provide trainings, workshops, conferences, webinars, materials, and educational toolkits to help facilitate the power of peer education.

For more information, please visit [www.naspa.org/constituent-groups/groups/bacchus-initiatives](http://www.naspa.org/constituent-groups/groups/bacchus-initiatives).

ture and foster success. In fact, college and university counseling centers as we know them were established in the late 1940s to assist the large number of World War II veterans using their benefits to attend college. Having connected on-campus support for academic, career, mental, physical, and behavioral health issues is vital to both retention and persistence to graduation.

As in the post-World War II era, colleges and universities are currently encouraging military learners (including veterans, along with those on active duty and in the National Guard) to take advantage of their educational benefits. Many face the challenges of injury, post-traumatic stress, and traumatic brain injury. Adjustment from a military environment to the less formal campus culture can be quite difficult. Providing mental and behavioral health services within a veterans' center or focused programming for military learner support can improve their functioning and learning in college.

Many colleges and universities are actively recruiting students from around the world. Adjustments of international students to U.S. campus norms, from appropriate classroom interactions to dating "American style," can be challenging. Like their domestic peers, some have previous mental health issues; others face mental and behavioral health challenges for the first time thousands of miles from their home and family support. International students from many cultures are less likely to utilize existing mental and behavioral health services. Providing culturally competent care is vital to their success.

Students with autism spectrum disorders, including Asperger's syndrome, also have important needs. Early identification, treatment, and effective accommodations before matriculation can prepare these students for the academic rigors of higher education. Social skills deficits, however, are often problematic for students participating in the classroom, learning in groups, engaging in student organizations and activities, and living in residence halls. Collaboration among several campus offices is necessary to respond to the needs of these students and promote their learning and retention.

## Mental and Behavioral Health and Campus Safety

Millions of college and university students negotiate the typical issues of academic success and failure, financial pressures, roommate and partner disputes, family concerns, and career challenges, and worry about the post-collegiate future, without any lasting harm to themselves or others. Most students are, or learn to be, resilient. But some students have serious problems—brought with them to college or developing while there—that can be destructive to themselves and others (Higher Education Mental Health Alliance 2011).

Sexual assault and interpersonal violence are currently receiving intense attention in the national dialogue about health risks in colleges and universities. There are policy, adjudication, counseling, and educational aspects to preventing and responding to dating violence, domestic violence, sexual assault, and stalking. Continuing the work of supporting survivors and ensuring a safer campus is an imperative in higher education.

Gun violence is an urgent, complex, and multifaceted societal problem that occasionally affects college and university campuses. A complex and variable constellation of risk and protective factors make persons more or less likely to use a firearm against themselves or others. Though mass shootings are a relatively rare event (.001 percent of all firearm-related deaths in the United States, according to the Centers for Disease Control), they are tragedies with horrible consequences for students and their families as well as for campus commu-

## Behavioral Intervention and Care Teams

Behavioral Intervention and Care Teams provide both intervention and prevention and improve safety through proactive, collaborative, coordinated, objective, and thoughtful strategies. They help identify, assess, intervene in, and manage situations that pose or may reasonably pose a threat to the safety and well-being of the campus community. They do so through referrals from faculty, staff, students, and all members of the campus community. These teams are inter-professional and cross-disciplinary, engaging police, mental health providers, student affairs staff, health-care providers, and other partners.

To learn more about successful implementation strategies for behavioral intervention and care teams, please visit [www.hemha.org](http://www.hemha.org).

nities. There is no consistent psychological profile or set of warning signs that can be used reliably to identify individuals who may commit mass shootings. A more promising approach is the strategy of behavioral threat assessment, which is concerned with identifying and intervening with individuals who have communicated threats of violence or engaged in problematic behavior indicating plans or preparation to commit a violent act.

Violence prevention on campuses requires primary prevention, consisting of efforts to promote healthy development and positive behavior in the general population; secondary prevention, including judicial sanctions, conflict mediation, and motivational interviewing for individuals and groups who have exhibited problematic behavior; and tertiary prevention, which includes intensive services for individuals who have engaged in threatening and/or aggressive behavior, as part of a specific strategy to mitigate risk.

Increasingly, campuses depend on behavioral intervention teams that promote coordination and communication across campus. Early identification of problematic behavior and effective intervention to mitigate risk by decreasing risk factors and promoting protective factors, combined with immediate access to counseling and psychological services on campus, are essential. Nonetheless, administrators in all kinds of institutions of higher education face difficult decisions in balancing the safety and support for disturbed and disturbing individuals with the safety and support of the greater campus community.

An important element of a culture of care and an environment of safety on campus is access to mental and behavioral expertise for faculty, staff, families, and peers who are concerned about a student. A classroom instructor may be concerned about the disruptive behavior of a student; parents may be worried about their child's despondency and despair after a breakup; resident advisors may have noticed alcohol abuse by a student in their residence hall; or a dean may be concerned about a student who will not graduate, but has invited his parents to the graduation ceremony. With the infusion of social media into student culture, concern can arise in many contexts—disturbed and disturbing students can exhibit problematic behavior in multiple ways, including interactions with friends, stray comments in class or elsewhere, texts, tweets, Facebook posts, and hotline calls. A typical consultation with a mental health professional would involve a careful review of the current behavior, any knowledge of past concerns, and assistance in referral to the appropriate resource. Both solid mental health expertise and knowledge of the local institution's policies and resources are necessary.

## Conclusion: Creating a Healthier, Safer Campus

**G**iven the complex relationships among mental health, problematic health behaviors, learning, campus safety, and the quality of the learning environment, mental and behavioral health should be a strategic priority on every campus.

Mental health professionals lead efforts to understand and respond to the needs of students with psychological, emotional, and behavioral concerns—but not all students who could benefit from mental or behavioral health services will come to the counseling center today, or any day. Students may not recognize the need for or recognize the availability of available services.

Therefore we also need a larger web of caring services and programs of outreach, education, and prevention that, taken together, achieve several important goals:

1. Eliminating fragmentation and improving access in supporting students' health, well-being, and learning



2. Recognizing patterns in campus life that suggest the presence of mental and behavioral health concerns among individual students, groups of students, or the campus environment itself
3. Providing outreach education and consultation to prepare all members of the campus community to recognize and respond to students with mental or behavioral health concerns
4. Emphasizing case-finding—using surveys, presentations, self-assessments, activities, and special events—to identify students whose lack of psychological well-being is interfering with their development, learning, and achievement
5. Nurturing a supportive tone and attitude about mental health in campus culture to challenge stereotypes about mental health problems, undermine prejudices and stigma about counseling, and provide encouragement to students to reflect on their own mental health and seek services when needed

Colleges and universities should train professional staff who provide academic advising, counsel students who intend to withdraw from the institution, or provide leadership to student groups and organizations to recognize signs of distress and dysfunction. Monitoring occurrences of injury, admission to detoxification facilities, sexual assault and relationship violence, academic and personal withdrawal from school, delay in graduation, significant drops in course load, and unexplained swings in GPA—not just more traditional mental health indicators—is important.

More counselors may be required, as well as better collaboration between primary care and mental and behavioral health-care services; such coordination serves to promote a holistic, integrated approach to delivering health care. Students with mental health problems may seek help first in primary care, and we can strengthen the resources of primary care providers to recognize, respond effectively, and/or refer students with mental and behavioral health problems. Fundamentally, we need a web of caring services that makes it more likely that students who experience symptoms or consequences of a mental or behavioral health problem, whether those symptoms are personal, social, or academic in nature—will “stick” somewhere and find their way to one of the entry points for mental and behavioral health care. In this way we can help produce better health and more positive academic outcomes for the greatest number of students possible.

Providing this connected culture of care will maximize learning and produce resilient and healthy world citizens that we are all proud to graduate.

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## References and Resources

- American College Health Association. 2013. *American College Health Association-National College Health Assessment II: Reference Group Executive Summary Spring 2013*. Hanover, MD: American College Health Association.
- American Psychological Association. 2013. *Gun Violence: Prediction, Prevention, and Policy*. Washington, DC: American Psychological Association. <http://www.apa.org/pubs/info/reports/gun-violence-prevention.aspx>.
- Arria, Amelia M., Kimberly M. Caldeira, Brittany A. Bugbee, Kathryn B. Vincent, and Kevin E. O'Grady. 2013. *The Academic Opportunity Costs of Substance Use During College*. College Park, MD: Center on Young Adult Health and Development.
- Association of American Colleges and Universities. 2007. *How Should Colleges Prepare Students to Succeed in Today's Global Economy?* Washington, DC: Association of American Colleges and Universities.
- Bishop, John B., and Sharon K. Walker. 1990. "What Role Does Counseling Play in Decisions Relating to Retention?" *Journal of College Student Development* 31 (1): 88–89.
- Carrell, Scott E., Mark Hoekstra, and James E. West. 2011. "Does Drinking Impair College Performance? Evidence from a Regression Discontinuity Approach." *Journal of Public Economics* 95 (1–2):54–62.
- Center for Collegiate Mental Health. 2012. *2011 Annual Report*. University Park, PA: The Pennsylvania State University. [http://caps.umich.edu/files/caps/CCMH\\_AnnualReport\\_2011.pdf](http://caps.umich.edu/files/caps/CCMH_AnnualReport_2011.pdf).
- Centers for Disease Control and Prevention. "Firearm Homicides and Suicides in Major Metropolitan Areas—United States, 2006–2007 and 2009–2010: Weekly." 2013. *Morbidity and Mortality Weekly Report (MMWR)* 62 (30): 597–602.
- Chung, Henry, and Michael Klein. 2007. "Improving Identification and Treatment of Depression in College Health." *Aetna Student Health Spectrum* (June): 13–19.
- Clark, M. P., Kara B. Wettersten, and T.W. Mason. 1999. "The Quality of Life Inventory (QOLI) as a Measure of Therapeutic Outcome and Predictor of Academic Retention." Paper presented at the meeting of the American Psychological Association, Boston.
- Cronce, Jessica M., and Mary E. Larimer. 2011. "Individual-Focused Approaches to the Prevention of College Student Drinking." *Alcohol Research & Health* 34 (2): 210–221.
- Dimeff, Linda A., John S. Baer, Daniel R. Kivlahan, and Alan G. Marlatt. 1999. *Brief Alcohol Screening and Intervention for College Students: A Harm Reduction Approach*. New York: Guilford Press.
- Eisenberg, Daniel, and Henry Chung. 2012. "Adequacy of Depression Treatment Among College Students in the United States." *General Hospital Psychiatry* 34 (3): 213–220.
- Eisenberg, Daniel, Ezra Golberstein, and Sarah E. Gollust. 2007. "Help-Seeking and Access to Mental Health Care in a University Student Population." *Medical Care* 45 (7): 594–601.
- Fleming, Michael F., Stacey L. Balousek, Paul M. Grossberg, Marlon P. Mundt, David Brown, Jennifer R. Wiegel, Larissa I. Zakletskaia, and Elizabeth M. Saewyc. 2010. "Brief Physician Advice for Heavy Drinking College Students: A Randomized Controlled Trial in College Health Clinics." *Journal of Studies on Alcohol and Drugs* 71 (1): 23–31.



- Gerdes, Hilary, and Brent Mallinckrodt. 1994. "Emotional, Social, and Academic Adjustment of College Students: A Longitudinal Study of Retention." *Journal of Counseling and Development* 72 (3): 281–288.
- Granello, Darcy Haag, and Sarah Newlin. 2007. "Evaluating the Effectiveness of Gatekeeper Training Using Logic Models to Guide Implementation and Evaluation." Paper presented at The Ohio State University Campus Suicide Prevention Grantee Technical Assistance Meeting, January 17–19, 2007, Gaithersburg, MD.
- Higher Education Mental Health Alliance. 2011. *Balancing Safety and Support on Campus: A Guide for Campus Teams*. New York: The Jed Foundation.
- Hingson, Ralph W. 2010. "Magnitude and Prevention of College Drinking and Related Problems." *Alcohol Research & Health* 33: 45–54.
- Hollingsworth, Kathy R., John H. Dunkle, and Louise Douce. 2009. "The High-Risk (Disturbed and Disturbing) College Student." *New Directions for Student Services* 128 (Winter): 37–54.
- Illovsky, Michael E. 1997. "Effects of Counseling on Grades and Retention." *Journal of College Student Psychotherapy* 12 (1): 29–44.
- Isaacs, Arnold R. 2011. "Communication and Trust: Pathways to Safer Campuses." *The Journal of the Academy for Critical Incident Analysis* 1 (2): 174–181.
- The Jed Foundation and Education Development Center, Inc. 2011. *A Guide to Campus Mental Health Action Planning*. New York: The Jed Foundation.
- Johnston, Lloyd D., Patrick M. O'Malley, Jerald G. Bachman, and John E. Schulenberg. 2013. *Monitoring the Future: National Results on Drug Use; 2012 Overview, Key Findings on Adolescent Drug Use*. Ann Arbor: Institute for Social Research, The University of Michigan.
- Kilmer, Jason R., and Shannon K. Bailie. 2012. "The Impact of College Student Substance Use: Working with Students on Campus." In *Substance Use in College Students*, edited by H. E. White and D. L. Rabiner. New York: Guilford Press.
- Klein, Matthew C. 2014. "How Americans Die." *Bloomberg View*, April 17. <http://www.bloomberg.com/dataview/2014-04-17/how-americans-die.html>.
- Larimer, Mary E., and Jessica M. Cronce. 2002. "Identification, Prevention, and Treatment: A Review of Individual-Focused Strategies to Reduce Problematic Alcohol Consumption by College Students." *Journal of Studies on Alcohol and Drugs* (supplement no. 14): 148–163.
- Larimer, Mary E., and Jessica M. Cronce. 2007. "Identification, Prevention, and Treatment Revisited: Individual-Focused College Drinking Prevention Strategies 1999–2006." *Addictive Behaviors* 32: 2439–2468.
- Lee, Donghyuck, Elizabeth A. Olsen, Ben Locke, Sandra Testa Michelson, and Eleonora Odes. 2009. "The Effects of College Counseling Services on Academic Performance and Retention." *Journal of College Student Development* 50 (3): 305–319.
- Lewis, Melissa A., Hollie Granato, Jessica A. Blayney, Ty W. Lostutter, and Jason R. Kilmer. 2011. "Predictors of Hooking Up Sexual Behaviors and Emotional Reactions Among U.S. College Students." *Archives of Sexual Behavior* 41 (5): 1219–29.
- London, Manuel. 2011. *The Oxford Handbook of Lifelong Learning*. Oxford: Oxford University Press.

- Malberg, Jessica E., Amelia J. Eisch, Eric J. Nestler, and Ronald S. Duman. 2000. "Chronic Antidepressant Treatment Increases Neurogenesis in Adult Rat Hippocampus." *The Journal of Neuroscience* 20 (24): 9104–9110.
- Novotney, Amy. 2014. "Students Under Pressure." *Monitor on Psychology* 45 (8): 36–41.
- Pascarella, Ernest T., Kathleen M. Goodman, Tricia A. Seifert, Gina Tagliapietra-Nicoli, Sueuk Park, and Elizabeth J. Whitt. 2007. "College Student Binge Drinking and Academic Achievement: A Longitudinal Replication and Extension." *Journal of College Student Development* 48 (6): 715–727.
- Schaus, James F., Mary Lou Sole, Thomas P. McCoy, Natalie Mullett, Jennifer Bolden, Janani Sivasithamparam, and Mary Claire O'Brien. 2009. "Screening for High-Risk Drinking in a College Student Health Center: Characterizing Students Based on Quantity, Frequency, and Harms." *Journal of Studies on Alcohol and Drugs* (supplement no. 16): 34–44.
- Sharkin, Bruce S. 2004. "College Counseling and Student Retention: Research Findings and the Implications for Counseling Centers." *Journal of College Counseling* 7 (2): 99–108.
- Singleton, Royce A., and Amy R. Wolfson. 2009. "Alcohol Consumption, Sleep, and Academic Performance Among College Students." *Journal of Studies on Alcohol and Drugs* 70 (3): 355–363.
- Turner, Alan, and Thomas R. Berry. 2000. "Counseling Center Contributions to Student Retention and Graduation: A Longitudinal Assessment." *Journal of College Student Development* 41 (6): 627–635.
- Wechsler, Henry, Jae Eun Lee, Meichun Kuo, and Hang Lee. 2000. "College Binge Drinking in the 1990s: A Continuing Problem; Results of the Harvard School of Public Health 1999 College Alcohol Study." *Journal of American College Health* 48 (March): 199–210.