WHAT WORKS FOR

IMPROVING MENTAL HEALTH

IN HIGHER EDUCATION?

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Many campus communities want to address mental health with a public health approach that incorporates a range of resources, practices, and policies to promote well-being among all of their students. However, one of the main difficulties encountered is the lack of clarity about which strategies are most effective. Sara Abelson, Sarah Ketchen Lipson, and Daniel Eisenberg conducted a comprehensive review, published as "Mental Health in College Populations: A Multidisciplinary Review of What Works, Evidence Gaps, and Paths Forward," that gathered information on evaluating the effectiveness of campus interventions from a range of academic fields and journals. Abelson, Lipson, and Eisenberg summarize their findings in this brief, presenting key takeaways and highlighting recommendations to help higher education leaders make evidence-based investments in student mental health.

CHALLENGES AND OPPORTUNITIES TO ADDRESS STUDENT MENTAL HEALTH

College and university leaders are well aware of the rising prevalence of mental health problems in student populations. These concerns have been building for a long time, since well before the COVID-19 pandemic. Data from the Healthy Minds Study (HMS)—a national survey of student mental health—have shown steady increases in the share of students who are reporting high levels of distress, particularly in recent years. For example, from 2016 to 2021, the percentage of students with significant symptoms of depression rose from 25 percent to 41 percent and the percentage of students with significant symptoms of anxiety rose from 21 percent to 34 percent.

An obvious first response to these trends has been for institutions to increase the availability of mental health services, such as counseling and psychiatric care. Indeed, many colleges and universities have substantially expanded their capacity in counseling and health centers. HMS data have shown a dramatic rise in service use; in the early years of the survey (2007–10), 20 to 25 percent of students with depression or anxiety had received mental health treatment in the previous year compared with more than 50 percent as of 2021.

Increasing the availability of mental health care is helpful but not sufficient, which many campus communities recognize. Despite the approximate doubling in mental health service use during the past 10 to 15 years, the rise in distress continues unabated—far outpacing increases in service use—and there are persistent inequities. Students of color and low-income, first-generation students have high levels of unmet mental health needs (Lipson et al. 2018); community college students also have higher levels of unmet mental health needs when compared with students at four-year institutions (Lipson et al. 2021).

These challenges have led campus communities to ask whether a more proactive, preventive approach to student mental health is possible. Such a public health approach should not replace traditional mental health services, which are generally effective but only reach a portion of students. Rather, this approach should include a wider range of resources and efforts to promote mental health and well-being among all students. This type of public health approach recognizes that mental health is dynamic and can be improved not only through treatment delivery but also social, economic, and institutional factors including sense of belonging, financial support, and campus climate and policies. This line of thinking is reflected in the frameworks and programs advocated by national organizations such as The Jed Foundation, The Steve Fund, and Active Minds, and it is also present in leading reports on student mental health such as the consensus study report issued by the National Academies of Sciences and Medicine in 2021.¹

¹ For mental health frameworks and resources, see The Jed Foundation, the Equity in Mental Health Framework, and Active Minds.

Implementing this vision is not easy, however. One of the main difficulties is the lack of clarity about which specific preventive approaches are most effective. Campus communities are using a variety of preventive intervention strategies that *might be* helpful; however, it is often unclear whether and to what degree these interventions are actually effective. A growing body of research evaluates interventions, but this literature is scattered across academic fields and journals. To bring coherence to this large volume of information and provide guidance to campus leaders, we conducted a comprehensive review of the evidence regarding higher education programs, services, practices, and policies that influence student mental health.² This brief summarizes key takeaways from that detailed review and offers recommendations to higher education leaders.

To underscore the urgency and opportunity even further, students' mental health has implications not only for their health and well-being but also for their academic outcomes (Eisenberg, Golberstein, and Hunt 2009). Research has shown that depression is associated with a twofold increase in the likelihood of dropping or stopping out of college without graduating (Eisenberg, Golberstein, and Hunt 2009). National dialogues around college persistence and student mental health have been largely separate, siloed conversations. Given that the same groups of students who have lower rates of persistence and retention also have higher levels of unmet

mental health needs—namely students of color and first-generation, low-income students—an urgent need exists to bring together these two dialogues to advance equity in both domains (Lipson et al. 2018). These efforts are likely to benefit not only individuals' well-being but also the well-being of institutions and communities through greater retention of tuition revenue and more skilled future employees in the U.S. economy.

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FIVE RECOMMENDATIONS FOR LEADERS IN HIGHER EDUCATION

Given the current mental health crisis, higher education leaders need to invest strategically in preventive public health approaches to student mental health, much as they had to apply public health practices to combat the COVID-19 pandemic. Strategies to improve student mental health must be guided by data and evidence to the greatest extent possible to maximize returns on investment. In this brief, we offer recommendations that promote the use of data to make evidence-based investments in student mental health. We recommend the following:

- 1. Use data to regularly assess population-level needs, priorities, and progress
- 2. Invest substantially in strategies with proven effectiveness
- 3. Revise or discontinue strategies with proven ineffectiveness
- 4. Invest modestly in strategies with promising evidence, then evaluate and reassess
- 5. Contribute to a broader movement toward an evidence-informed approach to student mental health

² The review is available in Higher Education: Handbook of Theory and Research, vol. 37 (Abelson, Lipson, and Eisenberg 2022).



RECOMMENDATION #1: USE DATA TO ASSESS NEEDS, PRIORITIES, AND PROGRESS

It is important to gather data on a regular basis from a variety of sources within each campus community. National data or data from other institutions can give an approximate sense of what might be happening in your student population, but each student population is unique. In the Healthy Minds Study (HMS) and other data sources, we see substantial variation across institutions in many key measures. We also see considerable change over time, so data from a few years ago might no longer be accurate. Knowing the current needs of the institution's population will guide where and how to invest in intervention. Sharing data and information widely with students, staff, and administrators has helped many colleges to spur collective investment in student mental health. Moreover, identifying the student groups who are experiencing the

greatest mental health burdens and not receiving care will allow for designing and implementing interventions specifically for these students—a critical step for enhancing mental health equity.

Population surveys and assessments, such as HMS, the Hope Center Basic Needs Survey, and the National College Health Assessment (NCHA), serve as key data sources. These sources offer a direct perspective from students, including those who have and have not utilized treatment. Routine satisfaction surveys of students who use campus services and programs are Sharing data and information widely with students, staff, and administrators has helped many colleges to spur collective investment in student mental health.

also valuable. Utilization and staffing data from the counseling and health center is another important source of information. In addition, it is important to track information about student crises and critical incidents.

In light of the large number of data points that are potentially available, higher education leaders might wonder which specific measures should receive the closest attention. For assessing campus needs and priorities, we suggest focusing on measures such as:

- The symptom prevalence of common mental health conditions (e.g., depression, anxiety, suicidal risk, disordered eating)
- Positive measures of mental health and well-being or flourishing
- Use of and barriers to mental health services and other support
- Differences across student subpopulations that might indicate inequities or varying needs

That said, it is not always possible to know which data points will be most revealing; therefore, it is important to gather data on a wide variety of measures (as is done in HMS, NCHA, and other national surveys) and then review the findings to see what jumps out as divergent from peer institutions or past data or otherwise appears concerning or notable.

When measuring progress over time, the set of measures to focus on might be somewhat different than those for measuring needs and priorities. For example, while the prevalence of mental health conditions is a proxy for overall needs in the population, it might not be realistic to change that indicator in an entire student population within a short time frame such as a year or two. In contrast, the following are examples of indicators that could realistically be improved even within a year or two:

- Perceptions of the climate with respect to mental health (e.g., HMS assessment statements such as "At my school, I feel that students' mental and emotional well-being is a priority")
- Sense of belonging
- Awareness of services and resources
- Helping behaviors (e.g., referring a friend in need)
- The usage rate and satisfaction rate with respect to services and programs

Measuring changes in barriers to accessing care and key risk factors such as students' experiences with discrimination and financial stress is also useful for assessing progress.

Campus leaders often raise important questions and concerns about collecting data on student mental health, including the limitations and downsides to surveying students. Students are asked to complete a number of surveys and forms, so adding another survey imposes a burden and typically yields response rates below 20 percent. These concerns are legitimate and must be balanced against the substantial value of gaining mental health data from the student perspective. We encourage campus leaders to advocate for mental health data collection as a top priority, aligning with the majority of presidents who indicate student mental health is a top concern (Turk, Soler, and Chessman 2020). Surveys should be prioritized that cover multiple priority areas and for which there are timely plans to use and respond to the findings. Another simple way to mitigate the burden on students at larger institutions is to draw a random sample rather than invite the entire student population; inviting 5,000 students is typically enough to gain the necessary data representing the larger population. Many institutions also alternate surveys from one year to the next (e.g., a rotation between HMS and NCHA) so that they are not fielding too many surveys in the same year.



RECOMMENDATION #2: INVEST SUBSTANTIALLY IN STRATEGIES WITH PROVEN EFFECTIVENESS

As noted previously, the evidence base for specific mental health programs, services, and practices is currently scattered across a wide range of sources, but through our comprehensive review (Abelson, Lipson, and Eisenberg 2022) we can offer some conclusions about which strategies are more effective than others.³ In this brief, we highlight a small number of intervention strategies that have strong evidence of effectiveness, based on evaluation research to date. These are strategies that leaders can invest in with confidence.

Extensive evidence suggests that **skill-training interventions** effectively promote positive adjustment and prevent negative adjustment in college students (Durlak 1997; Conley, Durlak, and Kirsch 2015; Yager and O'Dea 2008; Cimini and Rivero 2018; Howard et al. 2006; McDonald, Pritchard, and Landrum 2006; Stice, Shaw, and Marti 2007). Skill-training interventions teach students social, emotional, and coping skills to promote mental health and prevent problems. Supervised practice—behavioral rehearsal and supportive feedback—over multiple sessions is an essential component of effective skill-training interventions, though it is not universally employed and is often neglected (Conley, Durlak, and Kirsch 2015; Conley 2015).

Several types of skill-training interventions exist. **Mindfulness programs** with supervised practice have the most *consistently positive evidence*. They have been shown to improve social-emotional skills (e.g., coping, positive thinking, emotional and stress management), enhance self-perceptions (e.g., self-esteem, self-actualization) (Conley 2015; Astin 1997; Oman et al. 2008; Rosenzweig et al. 2003; Shapiro, Brown, and Biegel 2007; Shapiro, Schwartz, and Bonner 1998; Shapiro et al. 2008; Sears and Kraus 2009), reduce emotional distress (Conley, Durlak, and Kirsch 2015; Conley, Durlak, and Dickson 2013; Regehr, Glancy, and Pitts 2013) and mental health symptoms (Keng, Smoski, and Robins 2011; Hofmann et al. 2010), enhance well-being and

³ Italicized text indicates the level of evidence for the effectiveness of a given strategy; bolded text indicates the type of strategy.

flourishing (Long, Halvorson, and Lengua 2021; Chiesa and Serretti 2009; Davidson et al. 2003; Eberth and Sedlmeier 2012), and improve sleep (Friedrich and Schlarb 2018; Greeson et al. 2014). **Cognitive-behavioral and relaxation interventions** with supervised practice *show promise* for improving social-emotional skills and reducing psychological distress in college students (Conley 2015; Conley, Durlak, and Dickson 2013; Conley et al. 2017; Deckro et al. 2002). In contrast, meditation programs with supervised practice have *minimal evidence* for effectiveness (Conley, Durlak, and Kirsch 2015; Conley 2015; Conley et al. 2017).

Another *effective strategy* is routine **screenings** for mental health concerns—such as depression, anxiety, and suicide risk. Many colleges and universities are already implementing screening interventions widely (Schwartz and Davar 2018; Fedorchak and Cimini 2018). Several studies have shown that screening for mental health symptoms and suicidal thoughts and behaviors in academic settings can effectively identify at-risk individuals and link them to care (Hom, Stanley, and Joiner 2015; Eisenberg, Hunt, and Speer 2012; Peña and Caine 2006; Michelmore and Hindley 2012; Chung et al. 2011; King et al. 2015; Haas et al. 2008; Moutier et al.

2012). Of course, screening programs are only effective to the extent that evidence-based mental health services are available for students with needs that are identified through the screening. Given that most campus communities are already struggling to keep up with current needs for mental health services, any effort to expand screening programs must be paired with an efficient system for triaging students with the greatest needs into the appropriate level of care.

Although most robustly evaluated strategies focus on the individual student, colleges and universities have important opportunities to support student mental health through improvements to the broader campus environment. Institutions may reduce mental health risks through the physical environment, for example, by restricting means for suicide. In campus settings, this may include installing barriers or nets on bridges and rooftops and mounting Although most robustly evaluated strategies focus on the individual student, colleges and universities have important opportunities to support student mental health through improvements to the broader campus environment.

closet rods that dislodge from the wall when bearing significant weight in residences to prevent suicide by hanging. **Means restriction** is one of the few suicide prevention strategies with *proven effectiveness* (Cimini and Rivero 2018; Zalsman et al. 2016; Mann et al. 2005; Hawton 2007; Sarchiapone et al. 2011; Miller and Hemenway 2008; Reisch and Michel 2005; Beautrais 2001).

RECOMMENDATION #3: REVISE OR DISCONTINUE STRATEGIES WITH PROVEN INEFFECTIVENESS

The other side of investing in strategies with strong evidence is revising or abandoning strategies for which there is weak evidence. We are referring here not to strategies with incomplete evidence but rather to strategies with substantial evidence of disappointing results. There are at least two widely used strategies that fall into this category.

Psychoeducational interventions are didactic programs focused on providing mental health information (Durlak 1997). They target students' knowledge of and attitudes toward stress, coping, mental health symptoms, and mental health resources with hopes that the information will enable students to prevent or respond to future stress or symptoms and seek help if needed (Conley, Durlak, and Kirsch 2015). Across a large number of studies, settings, formats, and populations, psychoeducational interventions for mental health have been shown to be *minimally effective* in improving attitudes, changing behaviors, fostering skills, or preventing problems (Durlak 1997; Conley, Durlak, and Kirsch 2015; Yager and O'Dea 2008; Stice, Shaw, and Marti

2007; Conley, Durlak, and Dickson 2013; Conley et al. 2016; Corrigan et al. 2012; Yamaguchi et al. 2013). Psychoeducational programs have been found to be largely ineffective whether they address social-emotional skills (Conley 2015), stigma (Corrigan et al. 2012; Yamaguchi et al. 2013), sleep (Friedrich and Schlarb 2018; Dietrich et al. 2016), or eating-disorder prevention (Yager and O'Dea 2008; Stice, Shaw, and Marti 2007) and whether they are delivered in-person or via technology (Conley et al. 2016). Overall, the literature strongly indicates that college leaders should not invest in psychoeducation as an independent or primary approach to address student mental health (Durlak 1997; Conley, Durlak, and Kirsch 2015; Conley et al. 2017; Conley et al. 2016; Conley, Travers, and Bryant 2013).

These findings are not to say that psychoeducation in all forms should be abandoned. Although it typically has minimal impact by itself, psychoeducation is often a key piece in a multicomponent intervention. Many of the effective skill-training interventions noted previously contain psychoeducation; learning and applying a skill such as a mindfulness technique requires at least a basic understanding of why the skill is important and how it works.

Another type of intervention with questionable effectiveness is gatekeeper training for those who are not mental health professionals. These prevention programs seek to increase knowledge about mental health disorders, and they aim to enhance the ability to identify community members in distress and connect them to appropriate services (Lipson 2014). These trainings are meant to change community norms and behaviors around recognizing and responding to signs of mental health distress, but they have mostly been assessed by measuring learning and skill acquisition only among those trained (Lipson 2014; Wolitzky-Taylor et al. 2020). For example, evaluations have shown positive outcomes for trainee attitudes (e.g., levels of stigma) (Lipson 2014; Shannonhouse et al. 2017), self-efficacy (e.g., one's perceived ability to refer someone to get help) (Mitchell et al. 2013; Coleman et al. 2019), self-perceived intervention skills (Cross et al. 2010; Morse and Schulze 2013), and intention to intervene (Pearce, Rickwood, and Beaton 2003; Tompkins and Witt 2009; Indelicato, Mirsu-Paun, and Griffin 2011). Yet three college-based studies found no effects on trainee actual behaviors (intervening or referring to care) (Tompkins and Witt 2009; Indelicato, Mirsu-Paun, and Griffin 2011; McLean and Swanbrow Becker 2018), and a rare study that examined help-seeking and service use among the community members who are meant to benefit—in this case, student residents when their resident advisers were trained—detected no effects for the target population, even among residents with significant symptoms (Lipson et al. 2014).

As in the case of psychoeducation, we are not recommending the complete abandonment of gatekeeper training. After all, these programs are generally not expensive; further, it is encouraging that trainees are found in most evaluations to be more knowledgeable and confident in their skills than before. There is no reason to think these programs are harmful, and they are probably doing some good. That said, the evidence indicates that as a field we need to push for stronger outcomes from gatekeeper programs, such as clear indicators that more students with the highest levels of distress and risk are being identified and are accessing services as a result of the trainings.

We believe that current approaches to gatekeeper training need to be enhanced. One strategy for enhancement would be to include a series of brief booster or refresher trainings or exercises (perhaps with supervised practice) to ensure that the skills and knowledge from the initial training remain active in trainees' minds. Another possibility is to consider a saturation approach, in which all students, faculty, and staff receive training rather than just a select number of people (e.g., resident advisers or instructors). With a saturation approach, it is more realistic to hope for a meaningful shift in the culture and norms with respect to supporting each other and seeking help.

RECOMMENDATION #4: INVEST MODESTLY IN STRATEGIES WITH PROMISING EVIDENCE, THEN EVALUATE AND REASSESS

Whereas relatively few interventions with clear evidence of being effective exist, far more strategies show promising but incomplete evidence. These strategies warrant continued experimentation in campus communities, as long as we are also evaluating outcomes carefully—data are the only antidote to the vast uncertainty about which strategies work best. Thus, campus leaders should invest in these strategies and also in rigorous evaluations that clarify the outcomes. This information needs to be shared with other institutions to advance the field.

We can divide the large group of interventions with promising but incomplete evidence into two general categories. The first set of strategies are those that have begun to be evaluated in higher education and have demonstrated some positive impacts on mental health. The second set of strategies are innovative approaches for which there is not yet direct evidence regarding mental health benefits among college students, but there are reasons—such as theory and evidence from outside higher education settings—to believe these benefits might exist.

Strategies with Some Evidence of Effectiveness with College Students

Many institutions have a **peer health education** program (Wawrzynski, LoConte, and Straker 2011; Salovey and D'Andrea 1984), and peer educators increasingly receive mental health training (Wawrzynski and Lemon 2021). A large longitudinal study of students across 12 California colleges found that increased familiarity and involvement with the peer organization Active Minds over the course of one academic year were associated with *increases* in mental health knowledge, *decreases* in stigma, and *increases* in helping behaviors (providing or enhancing access to emotional support and helping peers get professional help) (Sontag-Padilla et al. 2018).

More research has focused on an array of peer support programs. Across settings, peer counseling and group interventions are *effective* in improving a wide range of health outcomes among diverse populations (Ramchand et al. 2017; Webel et al. 2010; Davidson et al. 2012). Mental health peer support programs at colleges and universities vary in delivery methods, aims, and training elements (John et al. 2018; Kirsch et al. 2014; Caporale-Berkowitz 2022). High-quality studies of these programs in higher education remain limited (John et al. 2018; Caporale-Berkowitz 2022), but a nine-week, peer-led prevention group focusing on transition to college and social support has demonstrated mental health and academic benefits through rigorous evaluation (Lamothe et al. 1995; Mattanah et al. 2010; Mattanah et al. 2012; Pratt et al. 2000). Another unusually well-evaluated, efficacious group peer intervention for college students is the Body Project, an eating disorder prevention program (Stice et al. 2006; Becker, Smith, and Ciao 2005; Halliwell and Diedrichs 2014; Matusek, Wendt, and Wiseman 2004; Stice et al. 2008; Mitchell et al. 2007; Becker et al. 2008; Stice et al. 2011; Stice et al. 2013; Stice, Marti and Cheng 2014). Online peer support interventions also hold promise, particularly for student populations that are less likely to utilize mental health treatment (Watkins and Jefferson 2013). For example, an online, social media-based intervention addressing mental health, manhood, and social support for Black college men reduced depressive symptoms among participants (Watkins et al. 2020).

Evidence from clinical contexts outside of higher education provides strong support for the efficacy of peer-led support groups. Enough work has been done to support two meta-analyses in depression, where peer-run support groups significantly reduced depressive symptoms, performing as well as professional-led interventions and significantly better than no-treatment conditions (Bryan and Arkowitz 2015; Pfeiffer et al. 2011; Byrom 2018). Peer-led support groups enhance positive outlooks, empowerment, hope, and self-efficacy more than traditional services alone (Repper and Carter 2011). In a randomized control trial, patients working with peer-led support groups felt more accepted and understood than patients enrolled in traditional care (Sells et al. 2006) and showed reduced depression relative to patients in typical group therapy (Pfeiffer et al. 2011).

Peer support, as well as many other factors, shapes students' sense of **belonging** in their institution. Sense of belonging—the human need to belong to and be accepted within a community—influences a wide range of social, psychological, and academic outcomes for adolescents and young adults (Bensimon 2007; Hausmann et al. 2009; Osterman 2000; Pittman and Richmond 2008; Shochet et al. 2006; Walton and Cohen 2011; Fink 2014; Gummadam, Pittman, and Ioffe 2016). There is *growing evidence* that sense of belonging is modifiable through interventions in students (Walton et al. 2015; Binning et al. 2020; Marksteiner, Janke, and Dickhäuser 2019; Layous et al. 2017; Stephens, Hamedani, and Destin 2014; Gilken and Johnson 2019; Winkelmes et al. 2016). These interventions not only produce health and academic benefits but also help reduce inequities, with strong support found in a series of rigorous randomized controlled trials (Walton and Cohen 2011; Brady et al. 2020). Fostering belonging via brief intervention at the beginning of college enhanced mentorship during college and led to better social

and psychological life outcomes both immediately and significantly postcollege for Black students (Walton and Cohen 2011; Brady et al. 2020). The intervention eliminated differences that were identified in the psychological well-being of Black and White participants in the treatment group that persisted in the control group (Brady et al. 2020). A similar intervention reduced stress and anxiety, improved adjustment to college life, and enhanced academic and social engagement among low-income students (Stephens, Hamedani, and Destin 2014). In addition to adopting interventions to improve individual students' sense of belonging, campus leaders have an opportunity

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to do this work at scale by removing and replacing discrediting cues (e.g., portraits primarily of White men in academic spaces, only binary gender options on forms) in everyday settings and adjusting features of the social, psychological, and physical environment to foster belonging and create mental health–enhancing environments (Purdie-Vaughns et al. 2008; Steele 2010; Geronimus et al. 2016).

Numerous opportunities exist for colleges to foster supportive **learning environments** (Dooris, Wills, and Newton 2014; Newton, Dooris, and Wills 2016; Orme and Dooris 2010). Mounting evidence *suggests* that changes to syllabi, courses, and classroom culture can help address students' mental and general health (Orme and Dooris 2010; Baik, Larcombe, and Brooker 2019; Knutson et al. 2022; Slavin, Schindler, and Chibnall 2014; Bowman 2010b). Institutions, schools, departments, and instructors have opportunities to offer mental health–focused curricula, reduce classroom and learning stressors that interfere with students' mental health (Robotham 2008), and adopt pedagogical practices that support students' well-being (Harper and Neubauer 2021; The University of Texas at Austin 2019; Bowman 2010a).

Higher education institutions have created **mental health-focused courses** and incorporated class content related to student mental health. Mental health interventions delivered as a class appear to be *more effective than* small-group programs (e.g., workshops outside of class; interventions conducted in residence halls) (Conley, Durlak, and Dickson 2013). Pre-post studies have found impacts on mental health knowledge (Becker et al. 2008), quality of life, depression symptoms, global mental health (Hassed et al. 2009), connectedness and hope (Shek et al. 2012; Shek et al. 2013), and stress reduction (Bughi, Sumcad, and Bughi 2006). In more robust evaluations, a psychosocial wellness seminar for first-year students improved psychosocial well-being and stress management (Conley, Travers, and Bryant 2013), and a brief mindfulness-based stress reduction elective course led to greater mindfulness and self-compassion (but not anxiety) after six weeks (Bergen-Cico, Possemato, and Cheon 2013). Well-evaluated positive psychology courses have shown effects on student mental health (Hood, Jelbert, and Santos 2021; Oades et al. 2011; Parks 2011; Young et al. 2022; Brett et al. 2020).

These findings suggest the value of further experimentation and evaluation to assess the expanding cadre of cost-effective, scalable mental health courses and curricula through rigorous research designs with diverse student populations (Riley and McWilliams 2007; Lo et al. 2018; Dobkin and Hutchinson 2013). Diversity-related courses should also be assessed for mental health effects since institutional LGBTQ+ course offerings (for credit) and taking more than one diversity course have been associated with lower psychological distress among sexual minority students (Woodford et al. 2018) and psychological well-being among first-year students (Bowman 2010b; Bowman 2010c; Bowman 2010a).

Colleges and universities have also worked to **reduce stressors associated with students' learning, testing, and the classroom environment**, which has shown *some efficacy*. Structured and transparent assessment practices can limit anxiety and equitably improve students' learning, retention, and testing performance (Murphy and Destin 2016; Chiou, Wang, and Lee 2014; Cross and Angelo 1988). Pass/fail grading has been shown to reduce stress and anxiety and improve well-being among medical students (Rohe et al. 2006; Bloodgood et al. 2009; Reed et al. 2011; Shiralkar et al. 2013). Beyond changing curricula and practices to reduce stressors, institutions and instructors have implemented pedagogical activities to enhance conditions for well-being in the classroom. Relevant foci include social connectedness, mindfulness, a growth mindset, resilience, gratitude, inclusivity, self-compassion, and life purpose (The University of Texas at Austin 2019). Syllabi statements that normalize mental health help-seeking and share mental health resources can influence students' intentions to contact instructors for assistance (Gurung and Galardi 2022).

Efforts to increase **mentoring** also *hold promise* for improving mental health. College students from traditionally underrepresented backgrounds who retain a greater number of natural mentors through their first year of college show reductions in depressive symptoms across the year (Hurd, Tan, and Loeb 2016), via enhanced self-worth that reduced psychological distress (Hurd et al. 2018). Students who feel more emotionally close to mentors report less depression and worry than students less connected to their mentors (Le, Hsu, and Raposa 2021). Mentors are recognized as being particularly important for retention, mental health, and well-being among graduate students, especially for students with marginalized identities (Goldberg, Kuvalanka, and dickey 2019; Hazell et al. 2020; Becerra et al. 2021; Allen et al. 2022; Hyun et al. 2006; Jones-White et al. 2022; Charles, Karnaze, and Leslie 2022; Ryan, Baik, and Larcombe 2022; Posselt 2021; Tuma et al. 2021).

Another approach for which there is *budding evidence* for higher education settings is "postvention." **Post-crisis intervention** aims to improve the campus community's response during and after mental health crises. A suite of evidence-based interventions exists to help K–12 schools prevent and reduce psychological distress symptoms among students after traumatic events (Kataoka et al. 2012). For instance, school-based interventions after Hurricane Katrina reduced such symptoms in students (Jaycox et al. 2010). At colleges, faculty and administrator responses to hate crimes and bias incidents can inform students' stress, anxiety, fear, and longer-term responses (El-Amin 2016). Proactive activities to promote healing and reduce risk (i.e., contagion) following a suicide—"postvention"—are recommended (HEMHA 2018; Miller and Mazza 2018), but evidence of effectiveness is still limited (Szumilas and Kutcher 2011).

Innovative Approaches Warranting Evaluation in Higher Education Settings

Interventions that **prevent discrimination and microaggressions** and those that **support sense of identity** *warrant further study*. Experiences with interpersonal, communal, and structural harms, such as racism and discrimination, which are unfortunately a common part of college for students of color, sexual and gender minorities, students with disabilities, and others impact mental health (Goodwill, Taylor, and Watkins 2021; Hwang and Goto 2008; Woodford, Kulick et al. 2014; Pieterse et al. 2010). Ally training programs reflect one strategy to increase support and decrease harm. They have been implemented in higher education to improve the collegiate experience of student veterans (Olsen, Badger, and McCuddy 2014), LGBTQ students (Poynter and Tubbs 2008), and students in recovery from substance use disorders (Beeson et al. 2019). These programs are recommended and popular but, unfortunately, rarely evaluated (Poynter and Tubbs 2008; Woodford, Kolb



et al. 2014; Draughn, Elkins, and Roy 2002). Diversity trainings and racial dialogue workshops are another category of interventions to decrease interpersonal harms for which there is frustratingly little evidence or agreement regarding effective interventions, desired outcomes, or even essential elements of such training (Williams 2019; Ogunyemi et al. 2020; Paluck 2006; Paluck and Green 2009). Positive (Miller and Donner 2000; Sue et al. 2019; White-Davis et al. 2018) and detrimental (Sue et al. 2009; Sue et al. 2010) effects have been demonstrated.

While mental health harms, such as discrimination, are ideally prevented, research demonstrates that factors such as racial and cultural socialization (e.g., cultural pride) can protect against the mental health consequences of experiencing discrimination (Keels, Durkee, and Hope 2017; Lee 2005; Reynolds and Gonzales-Backen 2017; Umaña-Taylor et al. 2015) For example, research suggests that positive feelings about one's racial-ethnic group and recognition of negative societal perceptions of one's racial-ethnic group may protect Black and Latino college students from the negative mental health repercussions of experiencing discrimination (Sellers et al. 2003; Sellers et al. 2006). In a longitudinal study, empowered racialization messages (warnings about discrimination combined with strategies for overcoming racial prejudice) received in late adolescence partially buffered respondents ages 20 to 22 against the mental health consequences of racial discrimination (Granberg et al. 2012). Lesbian, gay, bisexual, and queer college students with greater self-acceptance experience less distress from experiences of heterosexism and microaggressions (Woodford, Kulick et al. 2014). Identity-support interventions, including but not limited to racial, ethnic, sexual, or gender identity, are a potentially powerful but mostly unexplored strategy for impacting mental health in higher education (Goodwill, Taylor, and Watkins 2021; Woodford, Kulick et al. 2014; Pieterse et al. 2010; Keels, Durkee, and Hope 2017; Lee 2005; Reynolds and Gonzales-Backen 2017; Umaña-Taylor et al. 2015; Hwang and Goto 2008).

Families are an important source of social support in college (Mattanah, Lopez, and Govern 2011; Drum et al. 2009; Hope and Smith-Adcock 2015), but we were *unable to identify* any higher education interventions focused on families that were evaluated for impact on student mental health. Evidence outside of higher education suggests that family-focused interventions are worth investigating, however. For example, in random controlled trials, family-based intervention in suicidal adolescents have consistently shown a

reduction in suicidal ideation and suicide risk factors, an increase in protective factors, and a reduction in psychiatric hospitalizations and suicide attempts (Diamond et al. 2010; Wharff, Ginnis, and Ross 2012; Hooven et al. 2012; Pineda and Dadds 2013). Growing evidence documents the importance of family support to first-generation students and students of color (Torres, Jones, and Renn 2009; Torres and Solberg 2001; Strayhorn 2010; Nuñez and Kim 2012; Makomenaw 2014; Crockett et al. 2007). Since many students, especially those of color, are not being served by the campus mental health system (Lipson et al. 2018), family interventions might be a key avenue for increasing support systems and help-seeking. More research is needed to understand the mental health benefits of interventions providing housing, childcare, and employment supports to the growing number of students, especially at community colleges, who are supporting families (as parents, caregivers, or children) while in college (Makomenaw 2014; Ascend at the Aspen Institute and The Jed Foundation 2021; Nelson, Froehner, and Gault 2013; Kienzl et al. 2022).

Coaching interventions change behavior via goal-directed, collaborative strategies, often through motivational interviewing. This emerging class of interventions attempts to change behaviors related to mental health (e.g., increasing sleep, decreasing substance use, facilitating help-seeking) but *have not been rigorously evaluated with college students*.

Finally, there are many avenues through which **college and university policies** likely impact student mental health, though *studies of their mental health effects are rare* (Fernández et al. 2016; Dooris 2006; Byrd and McKinney 2012; Brubaker and Mancini 2017). Relevant policies include those **pertaining to substance use; sexual assault; leaves of absence; financial aid; and diversity, equity, and inclusion** (including protection from discrimination). Policies may influence mental health by shaping behavior (e.g., help-seeking and interpersonal harm), social integration and support (Pittman and Richmond 2008; Gummadam, Pittman and Ioffe 2016; Chen, Szalacha, and Menon 2014; Woodford, Han et al. 2014; Banks 2010; Stebleton, Soria, and Huesman 2014; Hawe, Shiell, and Riley 2004), composition of the student body (Bellmore et al. 2004; Elharake et al. 2020; Graham 2018; Graham, Munniksma, and Juvonen 2014), and campus climate (Schwartz and Davar 2018; Woodford et al. 2018; Goldberg, Beemyn, and Smith 2019; Rhodes et al. 2005; Streng and Kamimura 2015), as all of these are associated with mental health outcomes. For example, nondiscrimination policies inclusive of gender identity (in addition to sexual orientation) are directly associated with reduced discrimination, which is associated with less psychological distress (Woodford et al. 2018).

Institutional decisions regarding the form, timing, and distribution of **financial aid** are a *relatively unexplored but likely powerful* lever for enhancing student mental health. Financial stress taxes mental health, and aid may impact academic, social, financial, and psychological pressures.⁴ For example, qualitative research shows that access to financial aid through the California Dream Act reduced undocumented students' anxiety and mental health burdens (Raza et al. 2019). Negative psychological effects of student loans and debt have in fact been demonstrated. Debt broadly impacts psychological functioning (Selenko and Batinic 2011), anxiety (Cooke et al. 2004; Drentea 2000), and mental disorders (Sweet et al. 2013; Jenkins et al. 2008) and poses psychological burdens for college students (Robb, Moody, and Abdel-Ghany 2012; Dowd and Coury 2006).

⁴ For more on the effect of financial stress on mental health, see Adams, Meyers, and Beidas 2016; Cadaret and Bennett 2019; Raza et al. 2019; Gonzales, Suárez-Orozco, and Dedios-Sanguineti 2013.

RECOMMENDATION #5: SUPPORT A BROADER MOVEMENT TOWARD AN EVIDENCE-INFORMED APPROACH TO STUDENT MENTAL HEALTH

Our final set of recommendations pertain to an evidence-informed approach to mental health and the actions and objectives that operate on a much wider scale than any single campus, involving policymakers, foundations, philanthropists, and perhaps even the private sector. The following is an outline of critical next steps for advancing such a movement.

First, the field needs to **develop and maintain a centralized database of evidence** regarding the effectiveness of programs and services to support student mental health. This database must be thorough, nuanced, and easy to understand and use. It will require pulling together evidence from a wide variety of disciplines and sources, and it must be updated continuously as new evidence arrives.

Second, **provide active support for decision-makers such as campus leaders and administrators** when they use this database to select and implement programs. This active support helps decision-makers make sense of the complexity and nuance in the database and also helps campus professionals implement and sustain programs once they have been identified. Thus, the database of evidence must be surrounded by a network of experts who and peer institutions that can provide ongoing guidance and mutual support to the users of the information.

Third, **enhance incentives for using evidence to inform practices** with respect to student mental health. Campus leaders and funders of campus services and programs should consider requirements to use

evidence-based programs; alternately, they should conduct rigorous evaluations in tandem with promising but unproven programs. This type of policy could be enacted through national policies and organizations as well as state and regional initiatives. These large-scale initiatives would ideally be complemented by a bottom-up approach, whereby individual colleges and their stakeholders—such as presidents, provosts, deans, and counseling and health center directors—make their

Campus leaders are ideally positioned to help address the mounting challenges related to student mental health.

own decisions to focus on implementing only programs that have a certain standard of evidence or promising programs that are accompanied by rigorous evaluations.

Fourth, **invest in innovative research to address the evidence gaps** that we and others have identified. Research is needed on increasing the reach and engagement of students at scale in interventions; rigorously evaluating community-level and organization-level interventions; evaluating practices and policies, not just programs and services; adapting programs and services to different cultural contexts across student populations and college settings; and implementing programs so they maximize impact and sustainability.

Fifth and finally, **develop and strengthen the networks of practitioners and researchers** who collaborate on understanding and promoting student mental health. These networks are important not only for supporting users of the evidence base but also for facilitating the large-scale, multi-institution evaluations that are necessary to understand the effectiveness of campus-level programs and services.

In conclusion, we believe that campus leaders are ideally positioned to help address the mounting challenges related to student mental health. A more evidence-informed, policy-focused, equity-minded approach is needed. As we have described, campus leaders have many ways to advance this goal both within their own institutions and on a broader national level. Higher education is fundamentally designed to understand and address complex challenges, and its leaders now have the opportunity and responsibility to improve how we support the mental health and well-being of students.

REFERENCES

- Abelson, Sara, Sarah Ketchen Lipson, and Daniel Eisenberg. 2022. "Mental Health in College Populations: A Multidisciplinary Review of What Works, Evidence Gaps, and Paths Forward." In *Higher Education: Handbook of Theory and Research*, vol. 37, edited by Laura W. Perna, 133–238. Dordrecht, NL: Springer Netherlands.
- Adams, Danielle R., Steven A. Meyers, and Rinad S. Beidas. 2016. "The Relationship Between Financial Strain, Perceived Stress, Psychological Symptoms, and Academic and Social Integration in Undergraduate Students." *Journal of American College Health* 64 (5): 362–370. https://doi.org/10.1080/07448481.2016.1 154559.
- Allen, Hannah K., Flavius Lilly, Kerry M. Green, Faika Zanjani, Kathryn B. Vincent, and Amelia M. Arria. 2022. "Graduate Student Burnout: Substance Use, Mental Health, and the Moderating Role of Advisor Satisfaction." *International Journal of Mental Health and Addiction* 20, no. 2 (April): 1130–1146. https:// doi.org/10.1007/s11469-020-00431-9.
- Ascend at the Aspen Institute, and The Jed Foundation. 2021. *Improving Mental Health of Student Parents: A Framework for Higher Education*. Washington, DC: Ascend at the Aspen Institute.
- Astin, John A. 1997. "Stress Reduction Through Mindfulness Meditation." *Psychotherapy and Psychosomatics* 66 (2): 97–106. https://doi.org/10.1159/000289116.
- Baik, Chi, Wendy Larcombe, and Abi Brooker. 2019. "How Universities Can Enhance Student Mental Wellbeing: The Student Perspective." *Higher Education Research & Development* 38 (4): 674–687. https://doi.org/10.1080/07294360.2019.1576596.
- Banks, Kira Hudson. 2010. "African American College Students' Experience of Racial Discrimination and the Role of College Hassles." *Journal of College Student Development* 51, no. 1 (January/February): 23–34. https://doi.org/10.1353/csd.0.0115.
- Beautrais, Annette L. 2001. "Effectiveness of Barriers at Suicide Jumping Sites: A Case Study." *Australian and New Zealand Journal of Psychiatry* 35, no. 5 (October): 557–562. https://doi.org/10.1080/0004867010060501.
- Becerra, Monica, Emily Wong, Brooke N. Jenkins, and Sarah D. Pressman. 2021. "Does a Good Advisor a Day Keep the Doctor Away? How Advisor-Advisee Relationships Are Associated with Psychological and Physical Well-Being Among Graduate Students." *International Journal of Community Well-Being* 4, no. 4 (December): 505–524. https://doi.org/10.1007/s42413-020-00087-2.
- Becker, Carolyn Black, Lisa M. Smith, and Anna C. Ciao. 2005. "Reducing Eating Disorder Risk Factors in Sorority Members: A Randomized Trial." *Behavior Therapy* 36, no. 3 (Summer): 245–253. https://doi.org/10.1016/S0005-7894(05)80073-5.
- Becker, Craig M., Hans Johnson, Karen Vail-Smith, Cathy Maahs-Fladung, Debra Tavasso, Barry Elmore, and Charla Blumell. 2008. "Making Health Happen on Campus: A Review of a Required General Education Health Course." *Journal of General Education* 57 (2): 67–74. https://doi.org/10.1353/jge.0.0015.
- Beeson, Eric T., Rachel Ryding, Holly M. Peterson, Kerryn L. Ansell, Babatunde Aideyan, and Jennifer M. Whitney. 2019. "RecoveryZone: A Pilot Study Evaluating the Outcomes of an Online Ally Training Program." *Journal of Student Affairs Research and Practice* 56 (3): 284–297. https://doi.org/10.1080/19496 591.2018.1474765.

- Bellmore, Amy D., Melissa R. Witkow, Sandra Graham, and Jaana Juvonen. 2004. "Beyond the Individual: The Impact of Ethnic Context and Classroom Behavioral Norms on Victims' Adjustment." *Developmental Psychology* 40, no. 6 (November): 1159–1172. https://psycnet.apa.org/doi/10.1037/0012-1649.40.6.1159.
- Bensimon, Estela Mara. 2007. "The Underestimated Significance of Practitioner Knowledge in the Scholarship on Student Success." *The Review of Higher Education* 30, no. 4 (Summer): 441–469. https:// doi.org/10.1353/rhe.2007.0032.
- Bergen-Cico, Dessa, Kyle Possemato, and Sanghyeon Cheon. 2013. "Examining the Efficacy of a Brief Mindfulness-Based Stress Reduction (Brief MBSR) Program on Psychological Health." *Journal of American College Health* 61 (6): 348–360. https://doi.org/10.1080/07448481.2013.813853.
- Binning, Kevin R., Nancy Kaufmann, Erica M. McGreevy, Omid Fotuhi, Susie Chen, Emily Marshman,
 Z. Yasemin Kalender, Lisa Limeri, Laura Betancur, and Chandralekha Singh. 2020. "Changing Social
 Contexts to Foster Equity in College Science Courses: An Ecological-Belonging Intervention." *Psychological Science* 31, no. 9 (September): 1059–1070. https://doi.org/10.1177/0956797620929984.
- Bloodgood, Robert A., Jerry G. Short, John M. Jackson, and James R. Martindale. 2009. "A Change to Pass/ Fail Grading in the First Two Years at One Medical School Results in Improved Psychological Well-Being." *Academic Medicine* 84, no. 5 (May): 655–662. https://doi.org/10.1097/ACM.0b013e31819f6d78.
- Bowman, Nicholas A. 2010a. "College Diversity Experiences and Cognitive Development: A Meta-analysis." *Review of Educational Research* 80, no. 1 (March): 4–33. https://doi.org/10.3102/0034654309352495.
- Bowman, Nicholas A. 2010b. "The Development of Psychological Well-Being Among First-Year College Students." *Journal of College Student Development* 51, no. 2 (March/April): 180–200. https://doi. org/10.1353/csd.0.0118.
- Bowman, Nicholas A. 2010c. "Disequilibrium and Resolution: The Nonlinear Effects of Diversity Courses on Well-Being and Orientations Toward Diversity." *The Review of Higher Education* 33, no. 4 (Summer): 543–568. https://doi.org/10.1353/rhe.0.0172.
- Brady, Shannon T., Geoffrey L. Cohen, Shoshana N. Jarvis, and Gregory M. Walton. 2020. "A Brief Social-Belonging Intervention in College Improves Adult Outcomes for Black Americans." *Science Advances* 6, no. 18 (May 1). https://doi.org/10.1126/sciadv.aay3689.
- Brett, Chelsea, Katie Wang, Sarah R. Lowe, and Marney A. White. 2020. "Evaluation and Durability of a Curriculum-Based Intervention for Promoting Mental Health Among Graduate Students." *American Journal of Health Education* 51 (6): 350–359. https://doi.org/10.1080/19325037.2020.1822240.
- Brubaker, Sarah Jane, and Christina Mancini. 2017. "The Impact of Increased State Regulation of Campus Sexual Assault Practices: Perspectives of Campus Personnel." *Journal of School Violence* 16 (3): 286–301. https://doi.org/10.1080/15388220.2017.1318577.
- Bryan, Amanda E. B., and Hal Arkowitz. 2015. "Meta-analysis of the Effects of Peer-Administered Psychosocial Interventions on Symptoms of Depression." *American Journal of Community Psychology* 55, no. 3–4 (June): 455–471. https://doi.org/10.1007/s10464-015-9718-y.
- Bughi, Stephanie A., Jennifer Sumcad, and Stefan Bughi. 2006. "Effect of Brief Behavioral Intervention Program in Managing Stress in Medical Students from Two Southern California Universities." *Medical Education Online* 11 (1): e4593. https://doi.org/10.3402/meo.v11i.4593.
- Byrd, DeAnnah R., and Kristen J. McKinney. 2012. "Individual, Interpersonal, and Institutional Level Factors Associated with the Mental Health of College Students." *Journal of American College Health* 60 (3): 185–193. https://doi.org/10.1080/07448481.2011.584334.

- Byrom, Nicola. 2018. "An Evaluation of a Peer Support Intervention for Student Mental Health." *Journal of Mental Health* 27 (3): 240–246. https://doi.org/10.1080/09638237.2018.1437605.
- Cadaret, Michael C., and Sara Rieder Bennett. 2019. "College Students' Reported Financial Stress and Its Relationship to Psychological Distress." *Journal of College Counseling* 22, no. 3 (October): 225–239. https://doi.org/10.1002/jocc.12139.
- Caporale-Berkowitz, Norian A. 2022. "Let's Teach Peer Support Skills to All College Students: Here's How and Why." *Journal of American College Health* 70 (7): 1921–1925. https://doi.org/10.1080/07448481.202 0.1841775.
- Charles, Susan T., Melissa M. Karnaze, and Frances M. Leslie. 2022. "Positive Factors Related to Graduate Student Mental Health." *Journal of American College Health* 70 (6): 1858–1866. https://doi.org/10.1080/0 7448481.2020.1841207.
- Chen, Angela Chia-Chen, Laura A. Szalacha, and Usha Menon. 2014. "Perceived Discrimination and Its Associations with Mental Health and Substance Use Among Asian American and Pacific Islander Undergraduate and Graduate Students." *Journal of American College Health* 62 (6): 390–398. https://doi.or g/10.1080/07448481.2014.917648.
- Chiesa, Alberto, and Alessandro Serretti. 2009. "Mindfulness-Based Stress Reduction for Stress Management in Healthy People: A Review and Meta-analysis." *Journal of Alternative and Complementary Medicine* 15, no. 5 (May): 593–600. https://doi.org/10.1089/acm.2008.0495.
- Chiou, Chei-Chang, Yu-Min Wang, and Li-Tze Lee. 2014. "Reducing Statistics Anxiety and Enhancing Statistics Learning Achievement: Effectiveness of a One-Minute Strategy." *Psychological Reports* 115, no. 1 (August): 297–310. https://doi.org/10.2466/11.04.PR0.115c12z3.
- Chung, Henry, Michael C. Klein, Daniel Silverman, Janet Corson-Rikert, Eleanor Davidson, Patricia Ellis, and Caroline Kasnakian. 2011. "A Pilot for Improving Depression Care on College Campuses: Results of the College Breakthrough Series-Depression (CBS-D) Project." *Journal of American College Health* 59 (7): 628–639. https://doi.org/10.1080/07448481.2010.528097.
- Cimini, M. Dolores, and Estela M. Rivero. 2018. *Promoting Behavioral Health and Reducing Risk Among College Students: A Comprehensive Approach*. New York: Routledge.
- Coleman, Daniel, Natasha Black, Jeffrey Ng, and Emily Blumenthal. 2019. "Kognito's Avatar-Based Suicide Prevention Training for College Students: Results of a Randomized Controlled Trial and a Naturalistic Evaluation." *Suicide and Life-Threatening Behavior* 49, no. 6 (December): 1735–1745. https://doi. org/10.1111/sltb.12550.
- Conley, Colleen S. 2015. "SEL in Higher Education." In *Handbook of Social and Emotional Learning: Research and Practice*, edited by Joseph A. Durlak, Celene E. Domitrovich, Roger P. Weissberg, and Thomas P. Gullotta. New York: Guilford Press.
- Conley, Colleen S., Joseph A. Durlak, and Daniel A. Dickson. 2013. "An Evaluative Review of Outcome Research on Universal Mental Health Promotion and Prevention Programs for Higher Education Students." *Journal of American College Healt* 61 (5): 286–301. https://doi.org/10.1080/07448481.2013.8 02237.
- Conley, Colleen S., Joseph A. Durlak, and Alexandra C. Kirsch. 2015. "A Meta-analysis of Universal Mental Health Prevention Programs for Higher Education Students." *Prevention Science* 16, no. 4 (May): 487–507. https://doi.org/10.1007/s11121-015-0543-1.

- Conley, Colleen S., Joseph A. Durlak, Jenna B. Shapiro, Alexandra C. Kirsch, and Evan Zahniser. 2016. "A Meta-analysis of the Impact of Universal and Indicated Preventive Technology-Delivered Interventions for Higher Education Students." *Prevention Science* 17, no. 6 (August): 659–678. https://doi.org/10.1007/ s11121-016-0662-3.
- Conley, Colleen S., Jenna B. Shapiro, Alexandra C. Kirsch, and Joseph A. Durlak. 2017. "A Meta-analysis of Indicated Mental Health Prevention Programs for At-Risk Higher Education Students." *Journal of Counseling Psychology* 64, no. 2 (March): 121–140. https://psycnet.apa.org/doi/10.1037/cou0000190.
- Conley, Colleen S., Lea V. Travers, and Fred B. Bryant. 2013. "Promoting Psychosocial Adjustment and Stress Management in First-Year College Students: The Benefits of Engagement in a Psychosocial Wellness Seminar." *Journal of American College Health* 61 (2): 75–86. https://doi.org/10.1080/07448481.2012.754 757.
- Cooke, Richard, Michael Barkham, Kerry Audin, Margaret Bradley, and John Davy. 2004. "Student Debt and Its Relation to Student Mental Health." *Journal of Further and Higher Education* 28 (1): 53–66. https://doi.org/10.1080/0309877032000161814.
- Corrigan, Patrick W., Scott B. Morris, Patrick J. Michaels, Jennifer D. Rafacz, and Nicolas Rüsch. 2012. "Challenging the Public Stigma of Mental Illness: A Meta-analysis of Outcome Studies." *Psychiatric Services* 63, no. 10 (October): 963–973. https://doi.org/10.1176/appi.ps.201100529.
- Crockett, Lisa J., Maria I. Iturbide, Rosalie A. Stone Torres, Meredith McGinely, Marcela Raffaelli, and Gustavo Carlo. 2007. "Acculturative Stress, Social Support, and Coping: Relations to Psychological Adjustment Among Mexican American College Students." *Cultural Diversity and Ethnic Minority Psychology* 13, no. 4 (October): 347–355. https://psycnet.apa.org/doi/10.1037/1099-9809.13.4.347.
- Cross, K. Patricia, and Thomas A. Angelo. 1988. *Classroom Assessment Techniques: A Handbook for Faculty*. Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning, University of Michigan.
- Cross, Wendi, Monica M. Matthieu, DeQuincy Lezine, and Kerry L. Knox. 2010. "Does a Brief Suicide Prevention Gatekeeper Training Program Enhance Observed Skills?" Crisis: *The Journal of Crisis Intervention and Suicide Prevention* 31 (3): 149–159. https://doi.org/10.1027/0227-5910/a000014.
- Davidson, Larry, Chyrell Bellamy, Kimberly Guy, and Rebecca Miller. 2012. "Peer Support Among Persons with Severe Mental Illnesses: A Review of Evidence and Experience." *World Psychiatry* 11, no. 2 (June): 123–128. https://doi.org/10.1016/j.wpsyc.2012.05.009.
- Davidson, Richard J., Jon Kabat-Zinn, Jessica Schumacher, Melissa Rosenkranz, Daniel Muller, Saki F. Santorelli, Ferris Urbanowski, Anne Harrington, Katherine Bonus, and John F. Sheridan. 2003.
 "Alterations in Brain and Immune Function Produced by Mindfulness Meditation." *Psychosomatic Medicine* 65, no. 4 (July): 564–570. https://doi.org/10.1097/01.PSY.0000077505.67574.E3.
- Deckro, Glora R., Keli M. Ballinger, Michael Hoyt, Marilyn Wilcher, Jeffery Dusek, Patricia Myers, Beth Greenberg, David S. Rosenthal, and Herbert Benson. 2002. "The Evaluation of a Mind/Body Intervention to Reduce Psychological Distress and Perceived Stress in College Students." *Journal of American College Health* 50 (6): 281–287. https://doi.org/10.1080/07448480209603446.
- Diamond, Guy S., Matthew B. Wintersteen, Gregory K. Brown, Gary M. Diamond, Robert Gallop, Karni Shelef, and Suzanne Levy. 2010. "Attachment-Based Family Therapy for Adolescents with Suicidal Ideation: A Randomized Controlled Trial." *Journal of the American Academy of Child & Adolescent Psychiatry* 49, no. 2 (February): 122–131. https://doi.org/10.1016/j.jaac.2009.11.002.

- Dietrich, Shellene K., Coleen M. Francis-Jimenez, Meldia Delcina Knibbs, Ismael L. Umali, and Marie Truglio-Londrigan. 2016. "Effectiveness of Sleep Education Programs to Improve Sleep Hygiene and/ or Sleep Quality in College Students: A Systematic Review." *JBI Database of Systematic Reviews and Implementation Reports* 14, no. 9 (September): 108–134. https://doi.org/10.11124/jbisrir-2016-003088.
- Dobkin, Patricia L., and Tom A. Hutchinson. 2013. "Teaching Mindfulness in Medical School: Where Are We Now and Where Are We Going?" *Medical Education* 47, no. 8 (August): 768–779. https://doi.org/10.1111/medu.12200.
- Dooris, Mark. 2006. "Healthy Settings: Challenges to Generating Evidence of Effectiveness." *Health Promotion International* 21, no. 1 (March): 55–65. https://doi.org/10.1093/heapro/dai030.
- Dooris, Mark, Jane Wills, and Joanne Newton. 2014. "Theorizing Healthy Settings: A Critical Discussion with Reference to Healthy Universities." *Scandinavian Journal of Public Health* 42, no. 15 (November Supplement): 7–16. https://doi.org/10.1177/1403494814544495.
- Dowd, Alicia C., and Tarek Coury. 2006. "The Effect of Loans on the Persistence and Attainment of Community College Students." *Research in Higher Education* 47, no. 1 (February): 33–62. https://doi.org/10.1007/s11162-005-8151-8.
- Draughn, Tricia, Becki Elkins, and Rakhi Roy. 2002. "Allies in the Struggle: Eradicating Homophobia and Heterosexism on Campus." *Journal of Lesbian Studies* 6 (3–4): 9–20. https://doi.org/10.1300/J155v06n03_02.
- Drentea, Patricia. 2000. "Age, Debt and Anxiety." *Journal of Health and Social Behavior* 41, no. 4 (December): 437–450. https://doi.org/10.2307/2676296.
- Drum, David J., Chris Brownson, Adryon Burton Denmark, and Shanna E. Smith. 2009. "New Data on the Nature of Suicidal Crises in College Students: Shifting the Paradigm." *Professional Psychology: Research and Practice* 40, no. 3 (June): 213–222. https://psycnet.apa.org/doi/10.1037/a0014465.
- Durlak, Joseph A. 1997. Successful Prevention Programs for Children and Adolescents. New York: Plenum Press.
- Eberth, Juliane, and Peter Sedlmeier. 2012. "The Effects of Mindfulness Meditation: A Meta-analysis." *Mindfulness* 3, no. 3 (September): 174–189. https://doi.org/10.1007/s12671-012-0101-x.
- Eisenberg, Daniel, Ezra Golberstein, and Justin B. Hunt. 2009. "Mental Health and Academic Success in College." *The B.E. Journal of Economic Analysis & Policy* 9, no. 1 (December). https://doi.org/10.2202/1935-1682.2191.
- Eisenberg, Daniel, Justin Hunt, and Nicole Speer. 2012. "Help Seeking for Mental Health on College Campuses: Review of Evidence and Next Steps for Research and Practice." *Harvard Review of Psychiatry* 20, no. 4 (August 21): 222–232. https://doi.org/10.3109/10673229.2012.712839.
- El-Amin, Aaliyah. 2016. "Responding to Racial Trauma." *Usable Knowledge* (Harvard Graduate School of Education blog), October 24, 2016. https://www.gse.harvard.edu/uk/blog/responding-racial-trauma.
- Elharake, Jad A., Elena Frank, David A. Kalmbach, Douglas A. Mata, and Srijan Sen. 2020. "Racial and Ethnic Diversity and Depression in Residency Programs: A Prospective Cohort Study." *Journal of General Internal Medicine* 35, no. 4 (April): 1325–1327. https://doi.org/10.1007/s11606-019-05570-x.

- Fedorchak, Diane, and M. Dolores Cimini. 2018. "Implementing Screening, Brief Intervention, and Referral to Treatment in College Student Behavioral Health Settings." In *Promoting Behavioral Health and Reducing Risk Among College Students: A Comprehensive Approach*, edited by M. Dolores Cimini and Estela M. Rivero, 117–126. New York: Routledge.
- Fernández, Ana, Eloise Howse, Maria Rubio-Valera, Kathy Thorncraft, Jack Noone, Xuan Luu, Benjamin Veness, Marie Leech, Gwynnyth Llewellyn, and Luis Salvador-Carulla. 2016. "Setting-Based Interventions to Promote Mental Health at the University: A Systematic Review." *International Journal of Public Health* 61, no. 7 (September): 797–807. https://doi.org/10.1007/s00038-016-0846-4.
- Fink, John E. 2014. "Flourishing: Exploring Predictors of Mental Health Within the College Environment." *Journal of American College Health* 62 (6): 380–388. https://doi.org/10.1080/07448481.2014.917647.
- Friedrich, Anja, and Angelika A. Schlarb. 2018. "Let's Talk About Sleep: A Systematic Review of Psychological Interventions to Improve Sleep in College Students." *Journal of Sleep Research* 27, no. 1 (February): 4–22. https://doi.org/10.1111/jsr.12568.
- Geronimus, Arline T., Sherman A. James, Mesmin Destin, Louis F. Graham, Mark L. Hatzenbuehler, Mary C. Murphy, Jay A. Pearson, Amel Omari, and J. Phillip Thompson. 2016. "Jedi Public Health: Co-creating an Identity-Safe Culture to Promote Health Equity." *SSM–Population Health* 2 (December): 105–116. https://doi.org/10.1016/j.ssmph.2016.02.008.
- Gilken, Jennifer, and Helen L. Johnson. 2019. "Supporting Belongingness Through Instructional Interventions in Community College Classrooms." *Community College Enterprise* 25, no. 1 (Spring): 32–49.
- Goldberg, Abbie E., Genny Beemyn, and JuliAnna Z. Smith. 2019. "What Is Needed, What Is Valued: Trans Students' Perspectives on Trans-inclusive Policies and Practices in Higher Education." *Journal of Educational and Psychological Consultation* 29 (1): 27–67. https://doi.org/10.1080/10474412.2018.14803 76.
- Goldberg, Abbie E., Katherine Kuvalanka, and lore dickey. 2019. "Transgender Graduate Students' Experiences in Higher Education: A Mixed-Methods Exploratory Study." *Journal of Diversity in Higher Education* 12, no. 1 (March): 38–51. https://psycnet.apa.org/doi/10.1037/dhe0000074.
- Gonzales, Roberto G., Carola Suárez-Orozco, and Maria Cecilia Dedios-Sanguineti. 2013. "No Place to Belong: Contextualizing Concepts of Mental Health Among Undocumented Immigrant Youth in the United States." *American Behavioral Scientist* 57, no. 8 (August): 1174–1199. https://doi. org/10.1177/0002764213487349.
- Goodwill, Jannelle R., Robert Joseph Taylor, and Daphne C. Watkins. 2021. "Everyday Discrimination, Depressive Symptoms, and Suicide Ideation Among African American Men." *Archives of Suicide Research* 25 (1): 74–93. https://doi.org/10.1080/13811118.2019.1660287.
- Graham, Sandra. 2018. "Race/Ethnicity and Social Adjustment of Adolescents: How (Not If) School Diversity Matters." *Educational Psychologist* 53 (2): 64–77. https://doi.org/10.1080/00461520.2018.14288 05.
- Graham, Sandra, Anke Munniksma, and Jaana Juvonen. 2014. "Psychosocial Benefits of Cross-Ethnic Friendships in Urban Middle Schools." *Child Development* 85, no. 2 (March/April): 469–483. https://doi.org/10.1111/cdev.12159.

- Granberg, Ellen M., Mary Bond Edmond, Ronald L. Simons, Frederick X. Gibbons, and Man-Kit Lei. 2012.
 "The Association Between Racial Socialization and Depression: Testing Direct and Buffering Associations in a Longitudinal Cohort of African American Young Adults." *Society and Mental Health* 2, no. 3 (November): 207–255. https://doi.org/10.1177/2156869312451152.
- Greeson, Jeffrey M., Michael K. Juberg, Margaret Maytan, Kiera James, and Holly Rogers. 2014. "A Randomized Controlled Trial of Koru: A Mindfulness Program for College Students and Other Emerging Adults." *Journal of American College Health* 62 (4): 222–233. https://doi.org/10.1080/07448481.2014.887 571.
- Gummadam, Praveena, Laura D. Pittman, and Micah Ioffe. 2016. "School Belonging, Ethnic Identity, and Psychological Adjustment Among Ethnic Minority College Students." *The Journal of Experimental Education* 84 (2): 289–306. https://doi.org/10.1080/00220973.2015.1048844.
- Gurung, Regan A. R., and Noelle R. Galardi. 2022. "Syllabus Tone, More than Mental Health Statements, Influence Intentions to Seek Help." *Teaching of Psychology* 49, no. 3 (July): 218–223. https://doi. org/10.1177/0098628321994632.
- Haas, Ann, Bethany Koestner, Jill Rosenberg, David Moore, Steven J. Garlow, Jan Sedway, Linda Nicholas, Herbert Hendin, J. John Mann, and Charles B. Nemeroff. 2008. "An Interactive Web-Based Method of Outreach to College Students at Risk for Suicide." *Journal of American College Health* 57 (1): 15–22. https://doi.org/10.3200/JACH.57.1.15-22.
- Halliwell, Emma, and Phillippa C. Diedrichs. 2014. "Testing a Dissonance Body Image Intervention Among Young Girls." *Health Psychology* 33, no. 2 (February): 201–204. https://psycnet.apa.org/doi/10.1037/a0032585.
- Harper, Gary W., and Leah C. Neubauer. 2021. "Teaching During a Pandemic: A Model for Trauma-Informed Education and Administration." *Pedagogy in Health Promotion* 7, no. 1 (March): 14–24. https:// doi.org/10.1177/2373379920965596.
- Hassed, Craig, Steven de Lisle, Gavin Sullivan, and Ciaran Pier. 2009. "Enhancing the Health of Medical Students: Outcomes of an Integrated Mindfulness and Lifestyle Program." *Advances in Health Sciences Education* 14, no. 3 (August): 387–398. https://doi.org/10.1007/s10459-008-9125-3.
- Hausmann, Leslie R. M., Feifei Ye, Janet Ward Schofield, and Rochelle L. Woods. 2009. "Sense of Belonging and Persistence in White and African American First-Year Students." *Research in Higher Education* 50, no. 7 (November): 649–669. https://doi.org/10.1007/s11162-009-9137-8.
- Hawe, Penelope, Alan Shiell, and Therese Riley. 2004. "Complex Interventions: How 'Out of Control' Can a Randomised Controlled Trial Be?" *British Medical Journal* 328 (June 24): 1561. https://doi.org/10.1136/bmj.328.7455.1561.
- Hawton, Keith. 2007. "Restricting Access to Methods of Suicide: Rationale and Evaluation of This Approach to Suicide Prevention." *The Journal of Crisis Intervention and Suicide Prevention* 28 (Supplement 1): 4–9. https://psycnet.apa.org/doi/10.1027/0227-5910.28.S1.4.
- Hazell, Cassie M., Laura Chapman, Sophie F. Valeix, Paul Roberts, Jeremy E. Niven, and Clio Berry. 2020. "Understanding the Mental Health of Doctoral Researchers: A Mixed Methods Systematic Review with Meta-analysis and Meta-synthesis." *Systematic Reviews* 9: e197. https://doi.org/10.1186/s13643-020-01443-1.
- HEMHA (Higher Education Mental Health Alliance). 2018. Postvention: A Guide for Response to Suicide on College Campuses. New York: HEMHA.

- Hofmann, Stefan G., Alice T. Sawyer, Ashley A. Witt, and Diana Oh. 2010. "The Effect of Mindfulness-Based Therapy on Anxiety and Depression: A Meta-analytic Review." *Journal of Consulting and Clinical Psychology* 78, no. 2 (April): 169–183. https://psycnet.apa.org/doi/10.1037/a0018555.
- Hom, Melanie A., Ian H. Stanley, and Thomas E. Joiner. 2015. "Evaluating Factors and Interventions That Influence Help-Seeking and Mental Health Service Utilization Among Suicidal Individuals: A Review of the Literature." *Clinical Psychology Review* 40 (August): 28–39. https://doi.org/10.1016/j.cpr.2015.05.006.
- Hood, Bruce, Sarah Jelbert, and Laurie R. Santos. 2021. "Benefits of a Psychoeducational Happiness Course on University Student Mental Well-Being Before and During a COVID-19 Lockdown." *Health Psychology Open* 8 (1). https://doi.org/10.1177/2055102921999291.
- Hooven, Carole, Elaine Walsh, Kenneth C. Pike, and Jerald R. Herting. 2012. "Promoting CARE: Including Parents in Youth Suicide Prevention." *Family and Community Health* 35, no. 3 (July/September): 225–235. https://doi.org/10.1097/FCH.0b013e318250bcf9.
- Hope, Keely J., and Sondra Smith-Adcock. 2015. "A Reason to Live: Can Understanding Close Friendships in College Prevent Suicide?" *College Student Affairs Journal* 33, no. 1 (Fall): 85–104. https://doi.org/10.1353/ csj.2015.0001.
- Howard, Donna E., Glenn Schiraldi, Arlene Pineda, and Randi Campanella. 2006. "Stress and Mental Health Among College Students: Overview and Promising Prevention Intervention." In *Stress and Mental Health* of *College Students*, edited by Mery V. Landow, 91–123. New York: Nova Science Publishers.
- Hurd, Noelle M., Jamie Albright, Audrey Wittrup, Andrea Negrete, and Janelle Billingsley. 2018. "Appraisal Support from Natural Mentors, Self-Worth, and Psychological Distress: Examining the Experiences of Underrepresented Students Transitioning Through College." *Journal of Youth and Adolescence* 47, no. 5 (May): 1100–1112. https://doi.org/10.1007/s10964-017-0798-x.
- Hurd, Noelle M., Joseph S. Tan, and Emily L. Loeb. 2016. "Natural Mentoring Relationships and the Adjustment to College Among Underrepresented Students." *American Journal of Community Psychology* 57, no. 3–4 (June): 330–341. https://doi.org/10.1002/ajcp.12059.
- Hwang, Wei-Chin, and Sharon Goto. 2008. "The Impact of Perceived Racial Discrimination on the Mental Health of Asian American and Latino College Students." *Cultural Diversity and Ethnic Minority Psychology* 14, no. 4 (October): 326–335. https://psycnet.apa.org/doi/10.1037/1099-9809.14.4.326.
- Hyun, Jenny K., Brian C. Quinn, Temina Madon, and Steve Lustig. 2006. "Graduate Student Mental Health: Needs Assessment and Utilization of Counseling Services." *Journal of College Student Development* 47, no. 3 (May/June): 247–266. https://doi.org/10.1353/csd.2006.0030.
- Indelicato, Natalie Arce, Anca Mirsu-Paun, and Wayne D. Griffin. 2011. "Outcomes of a Suicide Prevention Gatekeeper Training on a University Campus." *Journal of College Student Development* 52, no. 3 (May–June): 350–361. https://doi.org/10.1353/csd.2011.0036.
- Jaycox, Lisa H., Judith A. Cohen, Anthony P. Mannarino, Douglas W. Walker, Audra K. Langley, Kate L. Gegenheimer, Molly Scott, and Matthias Schonlau. 2010. "Children's Mental Health Care Following Hurricane Katrina: A Field Trial of Trauma-Focused Psychotherapies." *Journal of Traumatic Stress* 23, no. 2 (April): 223–231. https://doi.org/10.1002/jts.20518.
- Jenkins, Rachel, Dinesh Bhugra, Paul Bebbington, Traolach Brugha, Michael Farrell, Jeremy Coid, Tom Fryers, Scott Weich, Nicola Singleton, and Howard Meltzer. 2008. "Debt, Income and Mental Disorder in the General Population." *Psychological Medicine* 38, no. 10 (October): 1485–1493. https://doi. org/10.1017/S0033291707002516.

- John, Nikita Margaret, Oliver Page, Scott Christopher Martin, and Paula Whittaker. 2018. "Impact of Peer Support on Student Mental Wellbeing: A Systematic Review." *MedEdPublish* 7:170. https://doi. org/10.15694/mep.2018.0000170.1.
- Jones-White, Daniel R., Krista M. Soria, Erin K. B. Tower, and Olena G. Horner. 2022. "Factors Associated with Anxiety and Depression Among U.S. Doctoral Students: Evidence from the gradSERU Survey." *Journal of American College Health* 70 (8): 2433–2444. https://doi.org/10.1080/07448481.2020.1865975.
- Kataoka, Sheryl, Audra K. Langley, Marleen Wong, Shilpa Baweja, and Bradley D. Stein. 2012. "Responding to Students with Posttraumatic Stress Disorder in Schools." *Child and Adolescent Psychiatric Clinics of North America* 21, no. 1 (January): 119–133. https://doi.org/10.1016/j.chc.2011.08.009
- Keels, Micere, Myles Durkee, and Elan Hope. 2017. "The Psychological and Academic Costs of School-Based Racial and Ethnic Microaggressions." *American Educational Research Journal* 54, no. 6 (December): 1316–1344. https://doi.org/10.3102/0002831217722120.
- Keng, Shian-Leng, Moria J. Smoski, and Clive J. Robins. 2011. "Effects of Mindfulness on Psychological Health: A Review of Empirical Studies." *Clinical Psychology Review* 31, no. 6 (August): 1041–1056. https:// doi.org/10.1016/j.cpr.2011.04.006.
- Kienzl, Gregory, Pei Hu, Ali Caccavella, and Sara Goldrick-Rab. 2022. Parenting While in College: Racial Disparities in Basic Needs Insecurity During the Pandemic. Philadelphia: The Hope Center for College, Community, and Justice. https://hope.temple.edu/sites/hope/files/media/document/PWIC_Final_2.9.pdf
- King, Cheryl A., Daniel Eisenberg, Kai Zheng, Ewa Czyz, Anne Kramer, Adam Horwitz, and Stephen Chermack. 2015. "Online Suicide Risk Screening and Intervention with College Students: A Pilot Randomized Controlled Trial." *Journal of Consulting and Clinical Psychology* 83, no. 3 (June): 630–636. https://psycnet.apa.org/doi/10.1037/a0038805.
- Kirsch, Daniel J., Stephanie L. Pinder-Amaker, Charles Morse, Marsha L. Ellison, Leonard A. Doerfler, and Michelle B. Riba. 2014. "Population-Based Initiatives in College Mental Health: Students Helping Students to Overcome Obstacles." *Current Psychiatry Reports* 16: e525. https://doi.org/10.1007/s11920-014-0525-1.
- Knutson, Douglas, Em Matsuno, Chloe Goldbach, Halleh Hashtpari, and Nathan Grant Smith. 2022.
 "Advocating for Transgender and Nonbinary Affirmative Spaces in Graduate Education." *Higher Education* 83, no. 2 (February): 461–479. https://doi.org/10.1007/s10734-020-00673-5.
- Lamothe, Daniel, Fiona Currie, Susan Alisat, Trevor Sullivan, Michael Pratt, S. Mark Pancer, and Bruce Hunsberger. 1995. "Impact of a Social Support Intervention on the Transition to University." *Canadian Journal of Community Mental Health* 14, no. 2 (September): 167–180. https://doi.org/10.7870/ cjcmh-1995-0023.
- Layous, Kristin, Eden M. Davis, Julio Garcia, Valerie Purdie-Vaughns, Jonathan E. Cook, and Geoffrey L. Cohen. 2017. "Feeling Left Out, but Affirmed: Protecting Against the Negative Effects of Low Belonging in College." *Journal of Experimental Social Psychology* 69 (March): 227–231. https://doi.org/10.1016/j. jesp.2016.09.008.
- Le, Thomas P., Ti Hsu, and Elizabeth B. Raposa. 2021. "Effects of Natural Mentoring Relationships on College Students' Mental Health: The Role of Emotion Regulation." *American Journal of Community Psychology* 68, no. 1–2 (September): 167–176. https://doi.org/10.1002/ajcp.12504.

- Lee, Richard M. 2005. "Resilience Against Discrimination: Ethnic Identity and Other-Group Orientation as Protective Factors for Korean Americans." *Journal of Clinical Psychology* 52, no. 1 (January): 36–44. https:// psycnet.apa.org/doi/10.1037/0022-0167.52.1.36.
- Lipson, Sarah Ketchen. 2014. "A Comprehensive Review of Mental Health Gatekeeper Trainings for Adolescents and Young Adults." *International Journal of Adolescent Medicine and Health* 26 (3): 309–320. https://doi.org/10.1515/ijamh-2013-0320.
- Lipson, Sarah Ketchen, Adam Kern, Daniel Eisenberg, and Alfiee M. Breland-Noble. 2018. "Mental Health Disparities Among College Students of Color." *Journal of Adolescent Health* 63, no. 3 (September 1): 348–356. https://doi.org/10.1016/j.jadohealth.2018.04.014.
- Lipson, Sarah Ketchen, Megan V. Phillips, Nathan Winquist, Daniel Eisenberg, and Emily G. Lattie. 2021. "Mental Health Conditions Among Community College Students: A National Study of Prevalence and Use of Treatment Services." *Psychiatric Services* 72, no. 10 (October): 1126–1133. https://doi.org/10.1176/ appi.ps.202000437.
- Lipson, Sarah Ketchen, Nicole Speer, Steven Brunwasser, Elisabeth Hahn, and Daniel Eisenberg 2014.
 "Gatekeeper Training and Access to Mental Health Care at Universities and Colleges." *Journal of Adolescent Health* 55, no. 5 (November): 612–619. https://doi.org/10.1016/j.jadohealth.2014.05.009.
- Lo, Kristin, Jamie Waterland, Paula Todd, Tanvi Gupta, Margaret Bearman, Craig Hassed, and Jennifer L. Keating. 2018. "Group Interventions to Promote Mental Health in Health Professional Education: A Systematic Review and Meta-analysis of Randomised Controlled Trials." *Advances in Health Sciences Education* 23, no. 2 (May): 413–447. https://doi.org/10.1007/s10459-017-9770-5.
- Long, Robyn, Max Halvorson, and Liliana J. Lengua. 2021. "A Mindfulness-Based Promotive Coping Program Improves Well-Being in College Undergraduates." *Anxiety, Stress & Coping: An International Journal* 34 (6): 690–703. https://doi.org/10.1080/10615806.2021.1895986.
- Makomenaw, Matthew. 2014. "Goals, Family, and Community: What Drives Tribal College Transfer Student Success." *Journal of Student Affairs Research and Practice* 51 (4): 380–391. https://doi.org/10.1515/jsarp-2014-0039.
- Mann, J. John, Alan Apter, Jose Bertolote, Annette Beautrais, Dianne Currier, Ann Haas, Ulrich Hegerl, Jouko Lonnqvist, Kevin Malone, Andrej Marusic, Lars Mehlum, George Patton, Michael Phillips, Wolfgang Rutz, Zoltan Rihmer, Armin Schmidtke, David Shaffer, Morton Silverman, Yoshitomo Takahashi, Airi Varnik, Danuta Wasserman, Paul Yip, and Herbert Hendin. 2005. "Suicide Prevention Strategies: A Systematic Review." *JAMA* 294, no. 16 (October 26): 2064–2074. https://doi.org/10.1001/jama.294.16.2064.
- Marksteiner, Tamara, Stefan Janke, and Oliver Dickhäuser. 2019. "Effects of a Brief Psychological Intervention on Students' Sense of Belonging and Educational Outcomes: The Role of Students' Migration and Educational Background." *Journal of School Psychology* 75 (August): 41–57. https://doi.org/10.1016/j. jsp.2019.06.002.
- Mattanah, Jonathan F, Jean F. Ayers, Bethany L. Brand, Leonie J. Brooks, Julie L. Quimby, and Scot W. McNary. 2010. "A Social Support Intervention to Ease the College Transition: Exploring Main Effects and Moderators." *Journal of College Student Development* 51, no. 1 (January/February): 93–108. https://doi. org/10.1353/csd.0.0116.
- Mattanah, Jonathan F., Leonie J. Brooks, Bethany L. Brand, Julie L. Quimby, and Jean F. Ayers. 2012. "A Social Support Intervention and Academic Achievement in College: Does Perceived Loneliness Mediate the Relationship?" *Journal of College Counseling* 15, no. 1 (April): 22–36. https://doi.org/10.1002/j.2161-1882.2012.00003.x.

- Mattanah, Jonathan F, Frederick G. Lopez, and John M. Govern. 2011. "The Contributions of Parental Attachment Bonds to College Student Development and Adjustment: A Meta-analytic Review." *Journal of Counseling Psychology* 58, no. 4 (October): 565–596. https://psycnet.apa.org/doi/10.1037/a0024635.
- Matusek, Jill Anne, Sally J. Wendt, and Claire V. Wiseman. 2004. "Dissonance Thin-Ideal and Didactic Healthy Behavior Eating Disorder Prevention Programs: Results from a Controlled Trial." *International Journal of Eating Disorders* 36, no. 4 (December): 376–388. https://doi.org/10.1002/eat.20059.
- McDonald, Theodore W., Mary E. Pritchard, and R. Eric Landrum. 2006. "Facilitating Preventative Mental Health Interventions for College Students: Institutional and Individual Strategies." In *Stress and Mental Health of College Students*, edited by Mery V. Landow, 225–241. New York: Nova Science Publishers.
- McLean, Kate, and Martin A. Swanbrow Becker. 2018. "Bridging the Gap: Connecting Resident Assistants and Suicidal Residents Through Gatekeeper Training." *Suicide and Life-Threatening Behavior* 48, no. 2 (April): 218–229. https://doi.org/10.1111/sltb.12348.
- Michelmore, Lisa, and Peter Hindley. 2012. "Help-Seeking for Suicidal Thoughts and Self-Harm in Young People: A Systematic Review." *Suicide and Life-Threatening Behavior* 42, no. 5 (October): 507–524. https://doi.org/10.1111/j.1943-278X.2012.00108.x.
- Miller, David N., and James J. Mazza. 2018. "School-Based Suicide Prevention, Intervention, and Postvention." In *Handbook of School-Based Mental Health Promotion: An Evidence-Informed Framework for Implementation*, edited by Alan W. Leschied, Donald H. Saklofske, and Gordon L. Flett, 261–277. Cham, Switzerland: Springer International.
- Miller, Joshua, and Susan Donner. 2000. "More Than Just Talk: The Use of Racial Dialogues to Combat Racism." *Social Work with Groups* 23 (1): 31–53. https://doi.org/10.1300/J009v23n01_03.
- Miller, Matthew, and David Hemenway. 2008. "Guns and Suicide in the United States." *The New England Journal of Medicine* 359, no. 10 (September 4): 989–991. https://doi.org/10.1056/nejmp0805923.
- Mitchell, Karen S., Suzanne E. Mazzeo, Sarah M. Rausch, and Kathryn L. Cooke. 2007. "Innovative Interventions for Disordered Eating: Evaluating Dissonance-Based and Yoga Interventions." *International Journal of Eating Disorders* 40, no. 2 (March): 120–128. https://doi.org/10.1002/eat.20282.
- Mitchell, Sharon L., Mahrin Kader, Sherri A. Darrow, Melinda Z. Haggerty, and Niki L. Keating. 2013.
 "Evaluating Question, Persuade, Refer (QPR) Suicide Prevention Training in a College Setting." *Journal of College Student Psychotherapy* 27 (2): 138–148. https://doi.org/10.1080/87568225.2013.766109.
- Morse, Charles C., and Rebekah Schulze. 2013. "Enhancing the Network of Peer Support on College Campuses." *Journal of College Student Psychotherapy* 27 (3): 212–225. https://doi.org/10.1080/87568225.2 013.798222.
- Moutier, Christine, William Norcorss, Pam Jong, Marc Norman, Brittany Kirby, Tara McGuire, and Sidney Zisook. 2012. "The Suicide Prevention and Depression Awareness Program at the University of California, San Diego School of Medicine." *Academic Medicine* 87, no. 3 (March): 320–326. https://doi.org/10.1097/acm.0b013e31824451ad.
- Murphy, Mary, and Mesmin Destin. 2016. *Promoting Inclusion and Identity Safety to Support College Success*. New York: The Century Foundation.
- Nelson, Bethany, Meghan Froehner, and Barbara Gault. 2013. *College Students with Children Are Common and Face Many Challenges in Completing Higher Education*. IWPR Briefing Paper No. C404. Washington, DC: Institute for Women's Policy Research.

- Newton, Joanne, Mark Dooris, and Jane Wills. 2016. "Healthy Universities: An Example of a Whole-System Health-Promoting Setting." *Global Health Promotion* 23, no. 1 (March Supplement): 57–65. https://doi.org/10.1177/1757975915601037.
- Nuñez, Anne-Marie, and Dongbin Kim. 2012. "Building a Multicontextual Model of Latino College Enrollment: Student, School, and State-Level Effects." *The Review of Higher Education* 35, no. 2 (Winter): 237–263. https://doi.org/10.1353/rhe.2012.0004.
- Oades, Lindsay G., Paula Robinson, Suzy Green, and Gordon B. Spence. 2011. "Towards a Positive University." *The Journal of Positive Psychology* 6 (6): 432–439. https://doi.org/10.1080/17439760.2011.63 4828.
- Ogunyemi, Dotun, Camille Clare, Yartizy M. Astudillo, Melissa Marseille, Eugene Manu, and Sun Kim. 2020. "Microaggressions in the Learning Environment: A Systematic Review." *Journal of Diversity in Higher Education* 13, no. 2 (June): 97–119. https://psycnet.apa.org/doi/10.1037/dhe0000107.
- Olsen, Timothy, Karen Badger, and Michael D. McCuddy. 2014. "Understanding the Student Veterans' College Experience: An Exploratory Study." *The United States Army Medical Department Journal* 2014 (October–December): 101–108.
- Oman, Doug, Shauna L. Shapiro, Carl E. Thoresen, Thomas G. Plante, and Tim Flinders. 2008. "Meditation Lowers Stress and Supports Forgiveness Among College Students: A Randomized Controlled Trial." *Journal* of American College Health 56 (5): 569–578. https://doi.org/10.3200/JACH.56.5.569-578.
- Orme, Judy, and Michael Dooris. 2010. "Integrating Health and Sustainability: The Higher Education Sector as a Timely Catalyst." *Health Education Research* 25, no. 3 (June): 425–437. https://doi.org/10.1093/her/cyq020.
- Osterman, Karen F. 2000. "Students' Need for Belonging in the School Community." *Review of Educational Research* 70, no. 3 (Fall): 323–367. https://doi.org/10.3102/00346543070003323.
- Paluck, Elizabeth Levy. 2006. "Diversity Training and Intergroup Contact: A Call to Action Research." *Journal of Social Issues* 62, no. 3 (September): 577–595. https://doi.org/10.1111/j.1540-4560.2006.00474.x
- Paluck, Elizabeth Levy, and Donald P. Green. 2009. "Prejudice Reduction: What Works? A Review and Assessment of Research and Practice." *Annual Review of Psychology* 60:339–367. https://doi.org/10.1146/annurev.psych.60.110707.163607.
- Parks, Acacia C. 2011. "The State of Positive Psychology in Higher Education: Introduction to the Special Issue." *The Journal of Positive Psychology* 6 (6): 429–431. https://doi.org/10.1080/17439760.2011.637729.
- Pearce, Katie, Debra Rickwood, and Susan Beaton. 2003. "Preliminary Evaluation of a University-Based Suicide Intervention Project: Impact on Participants." *Australian e-Journal for the Advancement of Mental Health* 2 (1): 25–35. https://doi.org/10.5172/jamh.2.1.25.
- Peña, Juan B., and Eric D. Caine. 2006. "Screening as an Approach for Adolescent Suicide Prevention." Suicide and Life-Threatening Behavior 36, no. 6 (December): 614–637. https://doi.org/10.1521/ suli.2006.36.6.614.
- Pfeiffer, Paul N., Michele Heisler, John D. Piette, Mary A.M. Rogers, and Marcia Valenstein. 2011. "Efficacy of Peer Support Interventions for Depression: A Meta-analysis." *General Hospital Psychiatry* 33, no. 1 (January–February): 29–36. https://doi.org/10.1016/j.genhosppsych.2010.10.002.

- Pieterse, Alex L., Robert T. Carter, Sarah A. Evans, and Rebecca A. Walter. 2010. "An Exploratory Examination of the Associations Among Racial and Ethnic Discrimination, Racial Climate, and Trauma-Related Symptoms in a College Student Population." *Journal of Counseling Psychology* 57, no. 3 (July): 255–263. https://psycnet.apa.org/doi/10.1037/a0020040.
- Pineda, Jane, and Mark R. Dadds. 2013. "Family Intervention for Adolescents with Suicidal Behavior: A Randomized Controlled Trial and Mediation Analysis." *Journal of the American Academy of Child & Adolescent Psychiatry* 52, no. 8 (August): 851–862. https://doi.org/10.1016/j.jaac.2013.05.015.
- Pittman, Laura D., and Adeya Richmond. 2008. "University Belonging, Friendship Quality, and Psychological Adjustment During the Transition to College." *The Journal of Experimental Education* 76 (4): 343–362. https://doi.org/10.3200/JEXE.76.4.343-362.
- Posselt, Julie. 2021. "Discrimination, Competitiveness, and Support in U.S. Graduate Student Mental Health." *Studies in Graduate and Postdoctoral Education* 12 (1): 89–112. https://doi.org/10.1108/SGPE-07-2020-0042.
- Poynter, Kerry John, and Nancy Jean Tubbs. 2008. "Safe Zones: Creating LGBT Safe Space Ally Programs." *Journal of LGBT Youth* 5 (1): 121–132.
- Pratt, Michael W., Bruce Hunsberger, S. Mark Pancer, Susan Alisat, Colleen Bowers, Kathleen Mackey, Alexandra Ostaniewicz, Evelina Rog, Bert Terzian, and Nicola Thomas. 2000. "Facilitating the Transition to University: Evaluation of a Social Support Discussion Intervention Program." *Journal of College Student Development* 41, no. 4 (July/August): 427–441.
- Purdie-Vaughns, Valerie, Claude M. Steele, Paul G. Davies, Ruth Ditlmann, and Jennifer Randall Crosby. 2008. "Social Identity Contingencies: How Diversity Cues Signal Threat or Safety for African Americans in Mainstream Institutions." *Journal of Personality and Social Psychology* 94, no. 4 (April): 615–630. https:// psycnet.apa.org/doi/10.1037/0022-3514.94.4.615.
- Ramchand, Rajeev, Sangeeta C. Ahluwalia, Lea Xenakis, Eric Apaydin, Laura Raaen, and Geoffrey Grimm.
 2017. "A Systematic Review of Peer-Supported Interventions for Health Promotion and Disease
 Prevention." *Preventive Medicine* 101 (August): 156–170. https://doi.org/10.1016/j.ypmed.2017.06.008.
- Raza, Syeda S., Zyshia Williams, Dalal Katsiaficas, and Lydia A. Saravia. 2019. "Interrupting the Cycle of Worrying: Financial Implications of the California DREAM Act in the Lives of Undocumented College Students." *The Review of Higher Education* 43, no. 1 (Fall): 335–370. https://doi.org/10.1353/ rhe.2019.0098.
- Reed, Darcy A., Tait D. Shanafelt, Daniel W. Satele, David V. Power, Anne Eacker, William Harper, Christine Moutier, Steven Durning, F. Stanford Massie Jr., Matthew R. Thomas, Jeff A. Sloan, and Liselotte N. Dyrbye. 2011. "Relationship of Pass/Fail Grading and Curriculum Structure with Well-Being Among Preclinical Medical Students: A Multi-institutional Study." *Academic Medicine* 86, no. 11 (November): 1367–1373. https://doi.org/10.1097/acm.0b013e3182305d81.
- Regehr, Cheryl, Dylan Glancy, and Annabel Pitts. 2013. "Interventions to Reduce Stress in University Students: A Review and Meta-analysis." *Journal of Affective Disorders* 148, no. 1 (May 15): 1–11. https://doi.org/10.1016/j.jad.2012.11.026.
- Reisch, Thomas, and Konrad Michel. 2005. "Securing a Suicide Hot Spot: Effects of a Safety Net at the Bern Muenster Terrace." *Suicide and Life-Threatening Behavior* 35, no. 4 (August): 460–467. https://doi.org/10.1521/suli.2005.35.4.460.

- Repper, Julie, and Tim Carter. 2011. "A Review of the Literature on Peer Support in Mental Health Services." *Journal of Mental Health* 20 (4): 392–411. https://doi.org/10.3109/09638237.2011.583947.
- Reynolds, Jamila E., and Melinda A. Gonzales-Backen. 2017. "Ethnic-Racial Socialization and the Mental Health of African Americans: A Cultural Review." *Journal of Family Theory and Review* 9, no. 2 (June): 182–200. https://doi.org/10.1111/jftr.12192.
- Rhodes, Warren A., Edward Singleton, Tiffany B. McMillan, and Carrol E. Perrino. 2005. "Does Knowledge of College Drinking Policy Influence Student Binge Drinking?" *Journal of American College Health* 54 (1): 45–49. https://doi.org/10.3200/JACH.54.1.45-49.
- Riley, Joan B., and Mindy McWilliams. 2007. "Engaged Learning Through Curriculum Infusion." *Peer Review* 9, no. 3 (Summer): 14–17.
- Robb, Cliff A., Beth Moody, and Mohamed Abdel-Ghany. 2012. "College Student Persistence to Degree: The Burden of Debt." *Journal of College Student Retention: Research, Theory and Practice* 13, no. 4 (February): 431–456. https://doi.org/10.2190/CS.13.4.b.
- Robotham, David. 2008. "Stress Among Higher Education Students: Towards a Research Agenda." *Higher Education* 56, no. 6 (December): 735–746. https://doi.org/10.1007/s10734-008-9137-1.
- Rohe, Daniel E., Patricia A. Barrier, Matthew M. Clark, David A. Cook, Kristin S. Vickers, and Paul A. Decker. 2006. "The Benefits of Pass-Fail Grading on Stress, Mood, and Group Cohesion in Medical Students." *Mayo Clinic Proceedings* 81, no. 11 (November): 1443–1448. https://doi. org/10.4065/81.11.1443.
- Rosenzweig, Steven, Diane K. Reibel, Jeffrey M. Greeson, George C. Brainard, and Mohammadreza Hojat. 2003. "Mindfulness-Based Stress Reduction Lowers Psychological Distress in Medical Students." *Teaching and Learning in Medicine* 15 (2): 88–92. https://doi.org/10.1207/S15328015TLM1502_03.
- Ryan, Tracii, Chi Baik, and Wendy Larcombe. 2022. "How Can Universities Better Support the Mental Wellbeing of Higher Degree Research Students? A Study of Students' Suggestions." *Higher Education Research & Development* 41 (3): 867–881. https://doi.org/10.1080/07294360.2021.1874886.
- Salovey, Peter, and Vincent J. D'Andrea. 1984. "A Survey of Campus Peer Counseling Activities." *Journal of American College Health* 32 (6): 262–265. https://doi.org/10.1080/07448481.1984.9939581.
- Sarchiapone, Marco, Laura Mandelli, Miriam Iosue, Costanza Andrisano, and Alec Roy. 2011. "Controlling Access to Suicide Means." *International Journal of Environmental Research and Public Health* 8, no. 12 (December): 4550–4562. https://doi.org/10.3390/ijerph8124550.
- Schwartz, Victor, and David Davar. 2018. "A Comprehensive Model to Promote Mental Health and Address Risk for Suicide." In *Promoting Behavioral Health and Reducing Risk Among College Students:* A Comprehensive Approach, edited by M. Dolores Cimini and Estela M. Rivero, 145–171. New York: Routledge.
- Sears, Sharon, and Sue Kraus. 2009. "I Think Therefore I Om: Cognitive Distortions and Coping Styles as Mediators for the Effects of Mindfulness Meditation on Anxiety, Positive and Negative Affect, and Hope." *Journal of Clinical Psychology* 65, no. 6 (June): 561–573. https://doi.org/10.1002/jclp.20543.
- Selenko, Eva, and Bernad Batinic. 2011. "Beyond Debt: A Moderator Analysis of the Relationship Between Perceived Financial Strain and Mental Health." *Social Science and Medicine* 73, no. 12 (December): 1725–1732. https://doi.org/10.1016/j.socscimed.2011.09.022.

- Sellers, Robert M., Cleopatra H. Caldwell, Karen H. Schmeelk-Cone, and Marc A. Zimmerman. 2003. "Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress Among African American Young Adults." *Journal of Health and Social Behavior* 44, no. 3 (September): 302–317. https:// doi.org/10.2307/1519781.
- Sellers, Robert M., Nikeea Copeland-Linder, Pamela P. Martin, and R. L'Heureux Lewis. 2006. "Racial Identity Matters: The Relationship Between Racial Discrimination and Psychological Functioning in African American Adolescents." *Journal of Research on Adolescence* 16, no. 2 (June): 187–216. https://doi. org/10.1111/j.1532-7795.2006.00128.x.
- Sells, Dave, Larry Davidson, Christopher Jewell, Paul Falzer, and Michael Rowe. 2006. "The Treatment Relationship in Peer-Based and Regular Case Management for Clients with Severe Mental Illness." *Psychiatric Services* 57, no. 8 (August): 1179–1184. https://doi.org/10.1176/ps.2006.57.8.1179.
- Shannonhouse, Laura, Yung-Wei Dennis Lin, Kelly Shaw, Reema Wanna, and Michael Porter. 2017. "Suicide Intervention Training for College Staff: Program Evaluation and Intervention Skill Measurement." *Journal* of American College Health 65 (7): 450–456. https://doi.org/10.1080/07448481.2017.1341893.
- Shapiro, Shauna L., Kirk Warren Brown, and Gina M. Biegel. 2007. "Teaching Self-Care to Caregivers: Effects of Mindfulness-Based Stress Reduction on the Mental Health of Therapists in Training." *Training and Education in Professional Psychology* 1, no. 2 (May): 105–115. https://psycnet.apa.org/ doi/10.1037/1931-3918.1.2.105.
- Shapiro, Shauna L., Doug Oman, Carl E. Thoresen, Thomas G. Plante, and Tim Flinders. 2008. "Cultivating Mindfulness: Effects on Well-Being." *Journal of Clinical Psychology* 64, no. 7 (July): 840–862. https://doi. org/10.1002/jclp.20491.
- Shapiro, Shauna L., Gary E. Schwartz, and Ginny Bonner. 1998. "Effects of Mindfulness-Based Stress Reduction on Medical and Premedical Students." *Journal of Behavioral Medicine* 21, no. 6 (December): 581–599. https://doi.org/10.1023/A:1018700829825.
- Shek, Daniel T. L., Rachel C. F. Sun, Y. H. Chui, S. W. Lit, Walter W. Yuen, Yida Y. H. Chung, and So-Wa Ngai. 2012. "Development and Evaluation of a Positive Youth Development Course for University Students in Hong Kong." *The Scientific World Journal* 2012: e263731. https://doi. org/10.1100/2012/263731.
- Shek, Daniel T. L., Lu Yu, Cecilia M. S. Ma, Rachel C. F. Sun, and Ting Ting Liu. 2013. "Development of a Credit-Bearing Service Leadership Subject for University Students in Hong Kong." *International Journal of Adolescent Medicine and Health* 25 (4): 353–361. https://doi.org/10.1515/ijamh-2013-0033.
- Shiralkar, Malan T., Toi B. Harris, Florence F. Eddins-Folensbee, and John H. Coverdale. 2013. "A Systematic Review of Stress-Management Programs for Medical Students." *Academic Psychiatry* 37, no. 3 (May): 158–164. https://doi.org/10.1176/appi.ap.12010003.
- Shochet, Ian M., Mark R. Dadds, David Ham, and Roslyn Montague. 2006. "School Connectedness is an Underemphasized Parameter in Adolescent Mental Health: Results of a Community Prediction Study." *Journal of Clinical Child & Adolescent Psychology* 35 (2): 170–179. https://doi.org/10.1207/ s15374424jccp3502_1.
- Slavin, Stuart J., Debra L. Schindler, and John T. Chibnall. 2014. "Medical Student Mental Health 3.0: Improving Student Wellness Through Curricular Changes." *Academic Medicine* 89, no. 4 (April): 573–577. https://doi.org/10.1097/acm.0000000000166.

- Sontag-Padilla, Lisa, Michael S. Dunbar, Feifei Ye, Courtney Kase, Rebecca Fein, Sara Abelson, Rachana Seelam, and Bradley D. Stein. 2018. "Strengthening College Students' Mental Health Knowledge, Awareness, and Helping Behaviors: The Impact of Active Minds, a Peer Mental Health Organization." *Journal of the American Academy of Child & Adolescent Psychiatry* 57, no. 7 (July): 500–507. https://doi. org/10.1016/j.jaac.2018.03.019.
- Stebleton, Michael J., Krista M. Soria, and Ronald J. Huesman Jr. 2014. "First-Generation Students' Sense of Belonging, Mental Health, and Use of Counseling Services at Public Research Universities." *Journal of College Counseling* 17, no. 1 (April): 6–20. https://doi.org/10.1002/j.2161-1882.2014.00044.x.
- Steele, Claude M. 2010. Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do. New York: W. W. Norton & Company.
- Stephens, Nicole M., MarYam G. Hamedani, and Mesmin Destin. 2014. "Closing the Social-Class Achievement Gap: A Difference-Education Intervention Improves First-Generation Students' Academic Performance and All Students' College Transition." *Psychological Science* 25, no. 4 (April): 943–953. https://doi.org/10.1177/0956797613518349.
- Stice, Eric, Meghan L. Butryn, Paul Rohde, Heather Shaw, and C. Nathan Marti. 2013. "An Effectiveness Trial of a New Enhanced Dissonance Eating Disorder Prevention Program Among Female College Students." *Behaviour Research and Therapy* 51, no. 12 (December): 862–871. https://doi.org/10.1016/j. brat.2013.10.003.
- Stice, Eric, C. Nathan Marti, and Zhen Hadassah Cheng. 2014. "Effectiveness of a Dissonance-Based Eating Disorder Prevention Program for Ethnic Groups in Two Randomized Controlled Trials." *Behaviour Research and Therapy* 55 (April): 54–64. https://doi.org/10.1016/j.brat.2014.02.002.
- Stice, Eric, C. Nathan Marti, Sonja Spoor, Katherine Presnell, and Heather Shaw. 2008. "Dissonance and Healthy Weight Eating Disorder Prevention Programs: Long-Term Effects From a Randomized Efficacy Trial." *Journal of Consulting and Clinical Psychology* 76, no. 2 (April): 329–340. https://psycnet.apa.org/ doi/10.1037/0022-006X.76.2.329.
- Stice, Eric, Paul Rohde, Heather Shaw, and Jeff Gau. 2011. "An Effectiveness Trial of a Selected Dissonance-Based Eating Disorder Prevention Program for Female High School Students: Long-Term Effects." *Journal of Consulting and Clinical Psychology* 79, no. 4 (August): 500–508. https://psycnet.apa.org/doi/10.1037/ a0024351.
- Stice, Eric, Heather Shaw, Emily Burton, and Emily Wade. 2006. "Dissonance and Healthy Weight Eating Disorder Prevention Programs: A Randomized Efficacy Trial." *Journal of Consulting and Clinical Psychology* 74, no. 2 (April): https://psycnet.apa.org/doi/10.1037/0022-006X.74.2.263.
- Stice, Eric, Heather Shaw, and C. Nathan Marti. 2007. "A Meta-analytic Review of Eating Disorder Programs: Encouraging Findings." *Annual Review of Clinical Psychology* 3:207–231. https://doi.org/10.1146/annurev. clinpsy.3.022806.091447.
- Strayhorn, Terrell L. 2010. "When Race and Gender Collide: Social and Cultural Capital's Influence on the Academic Achievement of African American and Latino Males." *The Review of Higher Education* 33, no. 3 (Spring): 307–332. https://doi.org/10.1353/rhe.0.0147.
- Streng, Tara K., and Akiko Kamimura. 2015. "Sexual Assault Prevention and Reporting on College Campuses in the U.S.: A Review of Policies and Recommendations." *Journal of Education and Practice* 6 (3): 65–71.

- Sue, Derald Wing, Sarah Alsaidi, Michael N. Awad, Elizabeth Glaeser, Cassandra Z. Calle, and Narolyn Mendez. 2019. "Disarming Racial Microaggressions: Microintervention Strategies for Targets, White Allies, and Bystanders." *American Psychologist* 74, no. 1 (January): 128–142. https://psycnet.apa.org/ doi/10.1037/amp0000296.
- Sue, Derald Wing, Annie I. Lin, Gina C. Torino, Christina M. Capodilupo, and David P. Rivera. 2009.
 "Racial Microaggressions and Difficult Dialogues on Race in the Classroom." *Cultural Diversity and Ethnic Minority Psychology* 15, no. 2 (April): 183–190. https://psycnet.apa.org/doi/10.1037/a0014191.
- Sue, Derald Wing, David P. Rivera, Christina M. Capodilupo, Annie I. Lin, and Gina C. Torino. 2010. "Racial Dialogues and White Trainee Fears: Implications for Education and Training." *Cultural Diversity* and Ethnic Minority Psychology 16, no. 2 (April): 206–214. https://psycnet.apa.org/doi/10.1037/a0016112.
- Sweet, Elizabeth, Arijit Nandi, Emma K. Adam, and Thomas W. McDade. 2013. "The High Price of Debt: Household Financial Debt and Its Impact on Mental and Physical Health." *Social Science and Medicine* 91 (August): 94–100. https://doi.org/10.1016/j.socscimed.2013.05.009.
- Szumilas, Magdalena, and Stan Kutcher. 2011. "Post-suicide Intervention Programs: A Systematic Review." *Canadian Journal of Public Health* 102, no. 1 (January): 18–19. https://doi.org/10.1007/BF03404872.
- Tompkins, Tanya L., and Jody Witt. 2009. "The Short-Term Effectiveness of a Suicide Prevention Gatekeeper Training Program in a College Setting with Resident Life Advisers." *Journal of Primary Prevention* 30, no. 2 (March): 131–149. https://doi.org/10.1007/s10935-009-0171-2.
- Torres, José B., and V. Scott Solberg. 2001. "Role of Self-Efficacy, Stress, Social Integration, and Family Support in Latino College Student Persistence and Health." *Journal of Vocational Behavior* 59, no. 1 (August): https://doi.org/10.1006/jvbe.2000.1785.
- Torres, Vasti, Susan R. Jones, and Kristen A. Renn. 2009. "Identity Development Theories in Student Affairs: Origins, Current Status, and New Approaches." *Journal of College Student Development* 50, no. 6 (November/December): 577–596. https://doi.org/10.1353/csd.0.0102.
- Tuma, Trevor T., John D. Adams, Benjamin C. Hultquist, and Erin L. Dolan. 2021. "The Dark Side of Development: A Systems Characterization of the Negative Mentoring Experiences of Doctoral Students." *CBE–Life Sciences Education* 20, no. 2 (June): ar16. https://doi.org/10.1187/cbe.20-10-0231.
- Turk, Jonathan M., Maria Claudia Soler, and Hollie M. Chessman. 2020. College and University Presidents Respond to COVID-19: July 2020 Survey. Washington, DC: American Council on Education. https:// www.acenet.edu/Research-Insights/Pages/Senior-Leaders/College-and-University-Presidents-Respond-to-COVID-19-July-2020.aspx.
- Umaña-Taylor, Adriana J., Brendesha M. Tynes, Russell B. Toomey, David R. Williams, and Kimberly J. Mitchell. 2015. "Latino Adolescents' Perceived Discrimination in Online and Offline Settings: An Examination of Cultural Risk and Protective Factors." *Developmental Psychology* 51, no. 1 (January): 87–100. https://psycnet.apa.org/doi/10.1037/a0038432.
- The University of Texas at Austin. 2019. *Texas Well-Being: Promoting Well-Being in UT Learning Environments*. Austin, TX: The University of Texas at Austin Counseling and Mental Health Center. https://www.cmhc. utexas.edu/wellbeing/images/guidebook.pdf.
- Walton, Gregory M., and Geoffrey L. Cohen. 2011. "A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students." *Science* 331, no. 6023 (March 18): 1443–1447. https://doi.org/10.1126/science.1198364.

- Walton, Gregory M., Christine Logel, Jennifer M. Peach, Steven J. Spencer, and Mark P. Zanna. 2015. "Two Brief Interventions to Mitigate a 'Chilly Climate' Transform Women's Experience, Relationships, and Achievement in Engineering." *Journal of Educational Psychology* 107, no. 2 (May): 468–485. https:// psycnet.apa.org/doi/10.1037/a0037461.
- Watkins, Daphne C., Janelle R. Goodwill, Natasha C. Johnson, Allura Casanova, Tao Wei, Julie Ober Allen, Ed-Dee G. Williams, Nkemka Anyiwo, Zachary A. Johnson, Lloyd M. Talley, and Jamie M. Abelson. 2020. "An Online Behavioral Health Intervention Promoting Mental Health, Manhood, and Social Support for Young Black Men: The YBMen Project." *American Journal of Men's Health* 14 (4). https://doi.org/10.1177/1557988320937215.
- Watkins, Daphne C., and S. Olivia Jefferson. 2013. "Recommendations for the Use of Online Social Support for African American Men." *Psychological Services* 10, no. 3 (August): 323–332. https://psycnet.apa.org/ doi/10.1037/a0027904.
- Wawrzynski, Matthew R., and Jacob D. Lemon. 2021. "Trends in Health and Wellness Peer Educator Training: A Five-Year Analysis." *Journal of Student Affairs Research and Practice* 58 (2): 135–147. https:// doi.org/10.1080/19496591.2020.1853554.
- Wawrzynski, Matthew R., Carl L. LoConte, and Emily J. Straker. 2011. "Learning Outcomes for Peer Educators: The National Survey on Peer Education." *New Directions for Student Services* 2011, no. 133 (Spring): 17–27. https://doi.org/10.1002/ss.381.
- Webel, Allison R., Jennifer Okonsky, Joyce Trompeta, and William L. Holzemer. 2010. "A Systematic Review of the Effectiveness of Peer-Based Interventions on Health-Related Behaviors in Adults." *American Journal* of *Public Health* 100, no. 2 (February): 247–253. https://doi.org/10.2105/AJPH.2008.149419.
- Wharff, Elizabeth A., Katherine M. Ginnis, and Abigail M. Ross. 2012. "Family-Based Crisis Intervention with Suicidal Adolescents in the Emergency Room: A Pilot Study." *Social Work* 57, no. 2 (April): 133–143. https://doi.org/10.1093/sw/sws017.
- White-Davis, Tanya, Jennifer Edgoose, Joedrecka S. Brown Speights, Kathryn Fraser, Jeffrey M. Ring, Jessica Guh, and George W. Saba. 2018. "Addressing Racism in Medical Education: An Interactive Training Module." *Family Medicine* 50, no. 5 (May): 364–368. https://doi.org/10.22454/FamMed.2018.875510.
- Williams, Monnica T. 2019. "Adverse Racial Climates in Academica: Conceptualization, Interventions, and Call to Action." *New Ideas in Psychology* 55 (December): 58–67. https://doi.org/10.1016/j. newideapsych.2019.05.002.
- Winkelmes, Mary-Ann, Matthew L. Bernacki, Jeffrey Butler, Michelle Zochowski, Jennifer Golanics, and Kathryn Harriss Weavil. 2016. "A Teaching Intervention That Increases Underserved College Students' Success." *Peer Review* 18, no. 1/2 (Winter/Spring): 31–36.
- Wolitzky-Taylor, Kate, Richard T. LeBeau, Marcelina Perez, Elizabeth Gong-Guy, and Timothy Fong. 2020. "Suicide Prevention on College Campuses: What Works and What Are the Existing Gaps? A Systematic Review and Meta-analysis." *Journal of American College Health* 68 (4): 419–429. https://doi.org/10.1080/0 7448481.2019.1577861.
- Woodford, Michael R., Yoonsun Han, Shelley Craig, Colin Lim, and Malinda M. Matney. 2014.
 "Discrimination and Mental Health Among Sexual Minority College Students: The Type and Form of Discrimination Does Matter." *Journal of Gay and Lesbian Mental Health* 18 (2): 142–163. https://doi.org/ 10.1080/19359705.2013.833882.

- Woodford, Michael R., Christopher L. Kolb, Gabrielle Durocher-Radeka, and Gabe Javier. 2014. "Lesbian, Gay, Bisexual, and Transgender Ally Training Programs on Campus: Current Variations and Future Directions." *Journal of College Student Development* 55, no. 3 (April): 317–322. https://doi.org/10.1353/ csd.2014.0022.
- Woodford, Michael R., Alex Kulick, Jason C. Garvey, Brandy R. Sinco, and Jun Sung Hong. 2018. "LGBTQ Policies and Resources on Campus and the Experiences and Psychological Well-Being of Sexual Minority College Students: Advancing Research on Structural Inclusion." *Psychology of Sexual Orientation and Gender Diversity* 5, no. 4 (December): 445–456. https://psycnet.apa.org/doi/10.1037/sgd0000289.
- Woodford, Michael R., Alex Kulick, Brandy R. Sinco, and Jun Sung Hong. 2014. "Contemporary Heterosexism on Campus and Psychological Distress Among LGBQ Students: The Mediating Role of Self-Acceptance." American Journal of Orthopsychiatry 84, no. 5 (September): 519–529. https://psycnet.apa.org/ doi/10.1037/ort0000015.
- Yager, Zali, and Jennifer A. O'Dea. 2008. "Prevention Programs for Body Image and Eating Disorders on University Campuses: A Review of Large, Controlled Interventions." *Health Promotion International* 23, no. 2 (June): 173–189. https://doi.org/10.1093/heapro/dan004.
- Yamaguchi, Sosei, Shu-I Wu, Milly Biswas, Madinah Yate, Yuta Aoki, Elizabeth A. Barley, and Graham Thornicroft. 2013. "Effects of Short-Term Interventions to Reduce Mental Health-Related Stigma in University or College Students: A Systematic Review." *The Journal of Nervous and Mental Disease* 201, no. 6 (June): 490–503. https://doi.org/10.1097/nmd.0b013e31829480df.
- Young, Tarli, Sarah Macinnes, Aaron Jarden, and Rachel Colla. 2022. "The Impact of a Wellbeing Program Imbedded in University Classes: The Importance of Valuing Happiness, Baseline Wellbeing and Practice Frequency." *Studies in Higher Education* 47 (4): 751–770. https://doi.org/10.1080/03075079.2020.17939 32.
- Zalsman, Gil, Keith Hawton, Danuta Wasserman, Kees van Heeringen, Ella Arensman, Marco Sarchiapone, Vladimir Carli, Cyril Höschl, Ran Barzilay, Judit Balazs, György Purebl, Jean Pierre Kahn, Pilar Alejandra Sáiz, Cendrine Bursztein Lipsicas, Julio Bobes, Doina Cozman, Ulrich Hegerl, and Joseph Zohar. 2016.
 "Suicide Prevention Strategies Revisited: 10-Year Systematic Review." *The Lancet Psychiatry* 3, no. 7 (July): 646–659. https://doi.org/10.1016/S2215-0366(16)30030-X.

