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CULTURAL ADAPTATION TO SUICIDE PREVENTION INTERVENTIONS ON COLLEGE CAMPUSES

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Abstract

Suicide is the second leading cause of death for adolescents and young adults ages 15 to 34. Given that college students are within that age range, it is believed they are at a similar risk. As college campuses try to address the suicide risk among their diverse student body, many have developed a public health approach, including the use of gatekeeper trainings. Many of these population-based interventions take a one-size fits all approach to suicide prevention, but with an increasingly diverse student population represented on college campuses this type of approach may fall short and fail to meet the cultural needs of a diverse student body. The *Cultural Theory and Model of Suicide* is discussed as a viable framework to inform an existing gatekeeper training program called Campus Connect, which was designed specifically for college students. Recommendations for ways that colleges can create a more inclusive suicide prevention program to meet the needs of diverse student bodies are provided at the end of this paper.

Suicide is a preventable death that impacts individuals, their families, and communities across the lifespan regardless of race, ethnicity, age, gender, socioeconomic status, or sexual orientation. It is a significant public health burden nationwide that results in an estimated $51 billion in combined medical and labor costs (Centers for Disease Control (CDC), 2015). Suicide rates have increased from 1999 through 2014 by 24%, and the pace of increase became greater after 2006 (National Center for Health Statistics (NCHS), 2016). In the year 2015, suicide accounted for more than twice as many deaths (44,193) than homicide (17,793) in the United States (NCHS, 2016). Among adults 18 years or older the reported percentage of those who experienced suicidal ideation in the past 12 months were 7.9% for adults who identified with two or more races, 4.8% for American Indians/Alaska Natives, 4.6% for Native Hawaiians/Other Pacific Islanders, 4.1% among whites, 3.6% among Hispanic or Latino, 3.3% among Asians, and 2.9% among Black/African Americans (Substance Abuse and Mental Health Services Administration (SAMHSA), 2014). Suicide is now the second leading cause of death in adolescents and young adults ranging from the ages of 15 to 34 (CDC WISQARS, 2016), surpassing homicide in recent years, which is now third. Suicide is also the second leading cause of death for college-age youth (CDC, 2018).

In the field of Suicidology, the study of suicidal behaviors, risk, and outcomes, there have been a number of theories developed to explain risk factors that contribute to suicidal behaviors, interventions, and effective risk assessments for individuals who are suicidal. Currently, one of the most prominent theories is Thomas Joiner's Interpersonal Theory of Suicide (IPTS) (2005; Van Orden et al., 2010) that consists of two constructs that combine social perception with negative cognitions about the self: thwarted belongingness and perceived burdensomeness. These constructs seek to explain the intrapersonal conditions that can potentially give way to

suicidal ideation. When thwarted belongingness and perceived burdensomeness combine with a third factor (acquired capability), which is a desensitization to pain and/or death, then ideation can escalate to suicidal gestures and attempts. In regard to college student populations, the development of this theory has been primarily tested on White-majority college students (Wong, Koo, Tran, Chiu, & Mok, 2011). Recent research has begun to explore if IPTS also applies to diverse college student populations. The IPTS was explored with a Native/American Indian population, and a significant relationship was found between perceived burdensomeness and suicidal ideation, but not thwarted belongingness (Cole et al., 2013). Wong and colleagues (2011) found that perceived burdensomeness was a more robust predictor of suicidal ideation than thwarted belongingness in an Asian American college student population. Another study explored the relevance of this theory by comparing White college students to Hispanic American/Latinx college students (Acosta, Hagan, & Joiner, 2017). This study found that Hispanic/Latinx college students displayed lower levels of perceived burdensomeness and suicidal desire than their white counterparts but did not display lower levels of thwarted belongingness. The authors also found that, contrary to their hypothesis, it was white students, not Hispanic/Latinx students, who displayed higher suicidal ideation in the face of thwarted belongingness and perceived burdensomeness. There were limitations to this study, including the use of a non-clinical college student sample, and a low sample size of Hispanic/Latinx college students (n=82) compared to white students. Another study was conducted examining how the IPTS and minority stress relate to the suicidal ideation and behavior of Lesbian, Gay, and Bisexual (LGB) youth ages 15-21 (Baams, Grossman, & Russell, 2015). These authors noted that to their knowledge at the time of the study there were only two other published studies examining IPTS with sexual minority youth. The authors found that sexual orientation

victimization, depression, and suicidal ideation was moderated by the perception of perceived burdensomeness (Baams, Grossman, & Russell, 2015). Grossman, Park, and Russell (2016) found that there were components of the IPTS that predicted suicidal ideation or attempts in transgender/gender non-conforming youth but noted that when perceived burdensomeness was not present in the model then thwarted belongingness was not a predictor of suicidal ideation. There have been a number of studies to test the IPTS with international students. One study found that perceived burdensomeness was associated with suicidal ideation for both International and domestic college students, but the degree of a sense of belonging to the campus only emerged for the International students as connected with suicidal ideation, while family belongingness was connected with suicidal ideation for domestic students (Servaty-Seib, Lockman, Shemwell, & Marks, 2016). Suh and colleagues (2017) found no difference in the pathways of Perceived Burdensomeness or Thwarted Belongingness to suicidal risk when comparing a cross-cultural sample of American college students to South Korean students.

The IPTS focuses on the individual who is experiencing suicidal ideation and at risk for suicidal behaviors. There is a growing number of studies that address what has been missing from theories, until more recently, which is the consideration of how race, ethnicity, sexual orientation, gender identity, and other cultural factors might influence the way that suicidal ideation and suicidal behavior is expressed among individual members of cultural groups. These studies highlight the importance of cultural considerations to inform suicide prevention interventions within a diverse student body on college campuses. Increasing with this growing body of research, is an understanding that addressing the risk factors of an identified individual's suicidal ideation or behavior is not enough. Expanding intervention efforts requires a more global approach to promote mental health and prevent suicides, while incorporating a strategy

that addresses "racial, ethnic, and cultural diversity" (p. 406, Wong, Brownson, and Schwing, 2011).

There has been increased effort directed at suicide prevention in recent decades, however there continues to be a gap between initiatives to address suicidality and the incorporation of critical considerations regarding how the culture an individual identifies with might impact the ways they express distress (cultural idioms), factors that might increase risk of suicide, who people are likely to disclose suicidal ideation to, how help-seeking behaviors are employed, and means for suicide attempts. There is a gap between general suicide prevention interventions and an understanding how culture influences suicidal expressions and behaviors. This gap may be a factor in the historic underutilization of college counseling services by students of color, and results in less effective outreach for certain student populations due to the lack of understanding of how culture may impact suicidal ideation and behaviors.

Suicide in College Youth

According to the Jed Foundation (2016) suicide is the second leading cause of death among college students and approximately 1,100 college students die by suicide each year. One of the challenges of tracking suicide and suicidal behaviors among college students is that there is not one overall database to accurately track rates nationally, but there are a number of sources that collect data on mental health for national samples of college students. These surveys are either self-report from the students themselves, or the data is collected from college counseling center directors who report on mental health outcomes of the students served in the counseling centers, and this data is aggregated to represent a national sample. According to a 2013 national survey from the Substance Abuse and Mental Health Administration (SAMHSA, 2014), the percentage of adults aged 18-22 years who experienced suicidal thoughts was similar for full-

time college students and other adults of the same age (8.0 and 8.7% respectively) and for those who reported making suicidal plans (2.4 and 3.1%). However, full-time college students between the ages of 18-22 years were less likely to attempt suicide compared to other same-aged adults (0.9 vs 1.9 %), and they were less likely to receive medical attention due to a suicide attempt in the past 12 months (0.3% vs. 0.7%) (SAMHSA, 2014). One possible explanation for similar rates of ideation but fewer deaths by suicide among the same age group is that attending college could be a protective factor against dying by suicide, possibly due to reduced access to the most lethal means (firearms) since most colleges ban firearms on their campuses (Schwartz, 2006; 2011). It is difficult to know exactly how many college students die by suicide because many colleges do not track student suicide deaths.

The most recent report from the American College Health Association [ACHA] (ACHA, 2017), a national college health assessment survey, found that 10.3% of college students reported they seriously considered suicide in the last 12 months, and 1.5% reported they made a suicide attempt in the last 12 months. The Center for Collegiate Mental Health [CCMH] (CCMH, 2015) found that for students who were first seeking treatment in a college counseling center, reports of having seriously considered suicide in the past four weeks totaled one quarter of students seeking services. Almost 31% of college students who sought counseling services in the 2013-2014 academic year reported they had seriously considered suicide at some point in their lives (CCMH, 2015). Based on clinician assessment, anxiety and depression are the most common presenting concerns to college counseling centers, and according to this data these clinical presentations increased over the previous four years prior to the survey (CCMH, 2016). In 2005, Gallagher noted that college counseling center directors reported an increase in the numbers of college students seeking help for their mental health, combined with an increased

need for crisis services. This trend has continued, with more recent data from 2015 showing that utilization of counseling services increased 30-40% while enrollment only increased by 5% during the same time period (CCMH, 2016), and that by 2016 crisis service ("rapid access") utilization had increased by 28% over the past six years.

The prevalence rates for lifetime self-harm behaviors, including non-suicidal self-injury, serious suicidal ideation, and suicide attempts has increased among students seeking treatment for the seventh year in a row (CCMH, 2016). The authors from this report concluded that community intervention efforts for suicide prevention, stigma reduction, and the identification combined with referral of at-risk students is increasing utilization rates (CCMH, 2016). In spite of this, it has been documented that the majority of college students that die by suicide were never seen at their college counseling centers (Gallagher, 2005); and 86% of college students who died by suicide in 2014 were never seen by their campus counseling center (Gallagher, 2015). There is a high prevalence of mental health problems among college students, yet untreated disorders are common in college student populations (ACHA, 2008; Drum et al., 2009; Hunt & Eisenberg, 2010), in spite of increased access to mental health and medical care due to requirements for insurance and the proximity of campus services (Hunt, Eisenberg, Lu, & Gathright, 2015). Blanco and colleagues (2008) found no difference in the rate of psychiatric disorders between whether college age students attended college or not and noted that almost half of the population had a psychiatric disorder in the past year; yet the authors found that treatment rates were low for both populations (college students and non-college students). This underscores the likelihood that suicidal ideation and behavior is a significant mental health issue on college campuses. Cerel and colleagues (2013) found that college students are likely to be exposed to information about suicide attempts through people they know, such as other college

students or family members, as well as exposure due to personally knowing someone who has attempted or died by suicide. The authors noted that there should be support on college campuses for suicidal behavior, gatekeeper trainings for college students overall, as well as specific messaging targeted toward certain groups of students who may be at higher risk for suicide (Cerel, Bolin, & Moore, 2013). A recent study assessing the utilization rates of college students of color and white college students found health care disparities persist for students of color on college campuses (similar to disparities for communities of color in the general population) in spite of increased access to health care and almost universal health care coverage (Hunt, Eisenberg, Lu, & Gathright, 2015).

College campuses have been taking steps to address the mental health needs of their students in multiple ways, including increasing access to resources on campus, taking a public health approach, and providing Gatekeeper trainings (CCMH, 2016; Brunner et al., 2014). A survey from the American College Health Association revealed that 50.5% of college students stated they had never received information on suicide prevention from their college or university, and a greater percentage stated this is information they would like to receive (ACHA, 2017). It is difficult to know the precise rates of mental health issues for students of color because data is typically aggregated, and many authors have pointed out (The Steve Fund, 2017) that researchers should present disaggregated data as well as aggregated data in order to provide a clear picture of the mental health of students of color. What is known is that treatment use among college students is higher for white students and women. Data from the Healthy Minds Study reveal that of students with reported mental health concerns and received treatment for these concerns, only 15% were Asian students, 26% were Black/African American students, 28% were Hispanic/Latinx students, while 40% of white students reported they received treatment for their

mental health problems (Eisenberg, Hunt, & Speer, 2012). Seeking treatment for mental health problems is particularly low for International students and students from lower socioeconomic backgrounds (Hunt & Eisenberg, 2010).

Historically, mental health services have been underutilized by racial/ethnic minority groups (Davidson, Yakushka, & Sanford-Martens, 2004). In a review of research comparing college student mental health with their same-age non-student peers, Hunt and Eisenberg (2010) found that utilization of services for college students was especially infrequent for International students, Asian American students, and students from lower socioeconomic backgrounds. They noted that stigmatizing attitudes the students held about mental illness were associated with reduced help-seeking (Hunt & Eisenberg, 2010). Downs and Eisenberg (2012) surveyed a random sample of 8,487 college students and found that race/ethnicity was an important correlate for suicidal behavior, and that Asian and Latinx students were significantly less likely to seek treatment than their white counterparts. Personal stigma around mental health was also found to be a negative predictor for engaging in services (Downs & Eisenberg, 2012).

Public Health Approach to Suicide Prevention on College Campuses

Drum, et al. (2009) have noted national attention around college student suicide has been on the rise for the past 25 years, yet for many years colleges continued to focus on the individual who is suicidal. They proposed a "problem-focused paradigm" versus an individual paradigm to address the issue of suicide on college campuses. One of the ways college campuses have increased efforts to address the mental health needs of students is by shifting to a public health approach for suicide prevention (Drum et al., 2009). Downs and Eisenberg (2012) cite evidence from their study on help seeking in college students who are suicidal that supports adopting a public health approach because based on their results, and prior research, it has been found that

social and relational factors are important links to suicidal thoughts and behaviors. Hunt and Eisenberg (2010) noted that having multiple pathways through which college students can be reached on campuses, and a holistic approach to practices and policies would best serve the needs of college students. They argued that the foundation of strategies should be built from the view that mental health supports the overall success and well-being of the student, and that a comprehensive approach would address not only the treatment of the individual but would also promote positive mental health outcomes for the entire student body via prevention interventions; they concluded that a public health approach seemed particularly promising to address the mental health needs of college students (Hunt & Eisenberg, 2010). Downs and Eisenberg (2012) echoed this sentiment, stating that effective suicide prevention efforts should be founded on a public health approach, and that comprehensive strategies should be targeted towards the attitudes and behaviors of individuals, how these attitudes interact in interpersonal relationships, and through campus level policies.

The Jed Foundation (2006) contends that suicide is an environmental and public health issue and that to address this concern there is a need for college campuses to shift their focus from prevention and treatment of the individual to prevention and treatment of the entire community, emphasizing that suicide prevention should be a concern for the entire campus community. The Jed Foundation created a framework of nine strategies entitle the *Comprehensive Approach to Suicide Prevention and Mental Health Promotion* (MHAP; Jed Foundation, 2006, 2012) in order to provide guidelines for college campuses to develop their suicide prevention and mental health promotion programming. The strategies from the framework consist of: (a) Identify and assist persons at risk for suicide, (b) Increase help-seeking, (c) Ensure access to effective mental health and suicide care and treatment, (d) Support

safe care transitions and create organization linkages, (e) Respond effectively to individuals in crisis, (f) Provide immediate and long-term postvention, (g) Reduce access to means of suicide, (h) Enhance life skills and resilience, (i) Promote social connectedness and support. These guidelines aim to inform a holistic approach that addresses the needs of individuals, groups, and institutional policies.

According to the Suicide Prevention Resource Center Registry of Best Practices, gatekeeper trainings and peer helper programs are evidenced-based ways to intervene with at-risk students. A gatekeeper is defined by the U.S. Department of Health and Human Services and National Action Alliance for Suicide Prevention (2012) as, "Those individuals in a community who have face-to-face contact with large numbers of community members as part of their usual routine. They may be trained to identify persons at risk of suicide and refer them to treatment or supporting services as appropriate" (p. 139). On college campuses, gatekeepers could be residence-life staff, advisers, faculty members, and peer leaders (Eisenberg, Hunt, & Speer, 2012). The overall goal of gatekeeper training is to increase the knowledge about suicide, address beliefs and attitudes about suicide and prevention (e.g. dispel myths about suicide), address the reluctance to intervene (including fear of causing a suicide if discussing it, or stigma), and build the gatekeeper's sense of self-efficacy through knowledge about the warning signs of suicide and skills to intervene. Gatekeeper training is the most frequent form of suicide prevention strategy used by Garret Lee Smith grantees, a financial award administered by SAMHSA to address prevention programming for youth suicide and is frequently awarded to college campuses to increase their prevention programming (Walrath, Garraza, Reid, Goldston, & Mckeon, 2015).

Data from the National Research Consortium of College Counseling Centers in Higher Education reveals that the first person college students often turn to for support when experiencing suicidal ideation is their peers (Drum et al., 2009). Since college students might first turn to their peers for support, Hunt and Eisenberg (2010) stated that an effective way to address the shortage of mental health professionals on college campuses, or the lack of funding to supply them, is to train gatekeepers. They suggest that gatekeeper training could be a highly effective way to equip peers and staff to identify mental illness and risk factors for suicide and assist in managing these issues through recognition of warning signs and learning how to refer students who are at risk for suicide. In their study of the help-seeking behaviors of college students who are suicidal, Downs and Eisenberg (2012) found that 64.1% of the students surveyed reported that receiving encouragement from others was an important influence in their help-seeking behavior, and 30% noted this encouragement came from friends. The finding that direct encouragement from others was an important reason for seeking help among two-thirds of those who received treatment underscores the potential value of training others within students' social networks to recognize signs of student distress and facilitate the connection to mental health resources (Eisenberg, Hunt, & Speer, 2012).

Campus Connect is a gatekeeper-training program that was exclusively designed for training gatekeepers on college campuses (Pasco, Wallack, Sartin, & Dayton, 2012). It consists of a three-hour training that increases knowledge and awareness about suicide warning signs, sources of referral, training to learn how to ask directly about suicide, and is geared specifically toward the experiences of college students. In addition, Campus Connect implements experiential learning exercises (e.g. role plays) to enhance the active listening skills and communication skills of the gatekeeper (Pasco et al., 2012). Because Campus Connect is not

solely didactic, it is unique compared to most other gatekeeper programs in that it facilitates enhancing interpersonal skills through experiential learning such as empathic listening and communication, validation, and non-judgment of the person in distress. The experiential component has been demonstrated to enhance the knowledge, skills, and self-efficacy of gatekeepers better than a didactic training alone (Pasco et al., 2012; Crimini et al., 2014). The training also seeks to normalize potential anxiety that could arise in a gatekeeper and prepare them for that possibility through behavioral rehearsal of experiential exercises during the training. These interventions increase the likelihood of recognition and intervention through educating the community around warning signs, facilitating dialogue, reducing stigma, and enhancing the knowledge of referral sources to connect students in distress with critical resources they need.

Cultural Adaptation to Suicide Prevention

The American college student population continues to diversify, parallel to the American population overall. Increased opportunities for access to higher education, along with college and university recognition of the importance of Diversity and Inclusive Excellence have contributed to the likelihood of a diverse student body on campuses across the nation. In spite of an increasingly diverse student body there is historic underutilization of mental health services by students of color (Davidson, Yakushka, & Sanford-Martens, 2004). All college students experience normative developmental tasks such as moving away from home and high school friends, academic demands, expectations for increased autonomy in managing health needs and studies, etc. (Cleary, Walter, & Jackson, 2011). Students from diverse backgrounds may face additional challenges and pressures during college that are complex and related to their unique cultural background (Brownson, Becker, Shadick, Jaggars, & Nitkin-Kaner, 2014; Eisenberg,

Hunt, & Speer, 2012; Shadick & Akhter, 2014) including discrimination, acculturative stress, and possibly lower SES that could lead to financial concerns and stress. It is important to consider the ways that cultural manifestations of depression or suicidal behavior may present differently than in a white majority population (Cheref et al., 2015; Goldston et al., 2008; Zayas & Pilat, 2008). These experiences combined with other stressors and individual personality characteristics could lead to an increase in distress, and possibly suicidal ideation or behaviors. This is particularly true given the current sociopolitical environment in America, which has the potential to negatively impact the mental health of cultural and ethnic minority students, including international students, add additional stressors, and contribute to a sense of isolation on college campuses (Chesin & Jeglic, 2012; Servaty-Seib, Lockman, Shemwell, & Marks, 2016). Goldston and colleagues (2008) noted that the cultural stigma of suicide is a critical barrier to preventing suicide.

In a review of the literature on how counseling centers meet students' needs, Brunner and colleagues (2014) noted that diversity is an important issue related to retention rates of students. Consideration of their personal backgrounds and how that could influence factors that keep students in school and impact how or how well students connect with the campus overall, as well as with students who are different from them. A potential barrier to students from diverse backgrounds receiving treatment for their suicidal ideation or other mental health concerns is a perception that service providers are not sensitive to cultural issues, which was cited by 9% of students of color as a reason for not seeking services (Eisenberg, Hunt, & Speer, 2012), a similar sentiment was expressed by non-heterosexual students by endorsing a concern that service providers may not be sensitive enough to sexual orientation or gender identity (Eisenberg, Hunt, & Speer, 2012). Additionally, suicidal behavior may emerge from negative interpersonal

experiences without the individual meeting criteria for depression or another mental health diagnosis; some ethnic minority students may display suicidal behaviors due to relationship distress within the family (Wong, Koo, Tran, Chiu, & Mok, 2011) in the absence of meeting criteria for a diagnosis. Arria and colleagues (2009) found that among a large sample of first-year college students, 60% of students who reported suicidal ideation did not meet criteria for elevated depressive symptoms, and that higher levels of conflict with a parent increased the risk for suicidal ideation.

Brownson and colleagues (2014) conducted a 2006 national survey of 14,742 undergraduate college students (subset of a larger sample of 108,536 of undergraduate and graduate students) and found that higher rates of distress, lifetime suicidal ideation, and lower rates of help seeking were reported by students of color compared to their white peers. This study revealed that although students endorsed recent suicidal ideation at similar rates across racial and ethnic groups, their help-seeking behaviors, reasons for ideation, and protective factors were different (Brownson, Becker, Shadick, Jaggars, & Nitkin-Kaner, 2014). Their study also highlighted some notable concerns around different iterations of distress and the referral patterns for ethnically diverse students. Due to the importance of these findings in the context of suicide prevention for culturally diverse students, the findings will be shared in greater detail in the following paragraph.

Brownson et al. (2014) found that white students were significantly more likely to be referred for mental health services by the first person they told about their suicidal ideation compared to all other groups of students, while white students also endorsed suicide attempts at the lowest rates compared to other student groups. Referral patterns varied dramatically between ethnic groups. Alaska Native/American Indian Students had the lowest referral rate by the first

person they told about their suicidal ideation (22%) and only 49% of those told reported actually receiving professional help; only 28% of African American/Black students who told someone about their suicidal thoughts were advised to seek professional help by the first person they told, and half those students who were advised to seek professional help actually received it; 35% of Asian American Students who reported experiencing suicidal ideation in the past 12 months reported receiving professional help after having these thoughts, 40% of those students were advised by the first person they told and 76% reported receiving professional help for suicidal ideation; 41% of Hispanic American/Latino students reported being advised by the first person they told to seek professional assistance for their suicidal ideation, and of those told to seek professional help 73% reported they did receive help for their suicidal ideation; 43% of International/Foreign students reported being advised to seek professional help for suicidal ideations, and 75% reported receiving that help; 63% of Multiracial/Multiethnic students reported they were advised to seek professional help for their suicidal ideation by the first person they told, but only 33% reported that they received professional help after being advised to seek it (Brownson et al., 2014). African American/Black students were also found to be less likely to seek mental health services from a medical provider in the Brownson et al. (2014) paper, perhaps due to cultural mistrust based on historical experiences (Chu et al., 2017). Overall, Asian American students had lower rates of lifetime professional help-seeking compared to other students. Multiracial/Multiethnic students reported the highest rates of suicidal ideation over their lifetime at 26%; white students endorsed suicide attempts at the lowest rate of any of the groups (Brownson et al., 2014). This study supports the need for addressing cultural factors through targeted interventions that increase help seeking, reduce barriers, and identify supportive resources that are protective for students in order to reduce college student distress and suicidal

behaviors. The authors also found that there seemed to be biases in referrals to seek professional help in that students of color reported in the survey that they were advised to seek professional help after disclosing suicidal ideation less often than their white peers (Brownson et al., 2014). Brownson and colleagues (2014) concluded that college campuses need to increase mental health promotion initiatives for racial and ethnic minority students because the standard outreach efforts may not be culturally relevant to certain groups, and thus these students may not be reached. They advised that universities may need to train faculty and staff along with other potential confidants on the importance of advising students to seek professional help and to address biases that may influence community members to refer white students at different rates than students of color (Brownson et al., 2014). The implications of this study are that prevention programs based on majority white populations, or in absence of cultural considerations around differing manifestations of distress and help-seeking patterns, may fail to reach the students who need the most support and encouragement to recognize their symptoms of distress and seek professional treatment. According to the findings of this study, it appears that students who already have good treatment utilization and lower rates of distress are also more likely to receive the most outreach and support, possibly because interventions are based on white cultural norms.

On a college campus, there are many cultures represented that come together to make up the campus culture, and attending to the unique traditions, beliefs, and experiences of diverse college students could increase the impact of gatekeeper trainings. Downs and Eisenberg (2012) pointed out that the rate of utilization, the barriers to treatment, and treatment provision were not uniform among a diverse group of college students in distress. They recommended employing a range of strategies (a public health approach) to promote the capacity within students' social networks to encourage help-seeking behaviors. They noted that identifying certain groups of

students and adapting strategies for these groups would enhance the effectiveness of campaigns and ensure more efficient use of campus resources that are often limited (Downs & Eisenberg, 2012). Additionally, the focus of suicide prevention programming should be aimed at enhancing student connectedness through social support networks, increasing awareness about possible signs of suicidal ideation (including the use of alcohol as a risk factor), and providing education to parents on effective ways to support students who could be at risk for suicidal behavior, rather than solely focusing on students who are depressed which could leave out a large proportion of students that experience suicidal ideation (Arria et al., 2009). As Goldston and colleagues (2008) point out, the issue of suicide prevention and intervention should focus on both the risk factors, and at-risk youth, as well as the strengths that these youths and their community may possess to serve as a buffer to the risk of suicidal behavior. Suicide prevention efforts should be aimed at students' perceived barriers, and sensitive to differences within student subgroups, as well as efforts aimed at increasing help-seeking behaviors by reducing students' efforts to minimize their mental health problems by shifting students' perceptions about their mental health difficulties being more urgent (Czyz et al., 2013).

The Jed Foundation (2006) recommends that college campuses consider the ethnic, racial, cultural, and spiritual diversity of the student body in order to create protocols unique to specific campus populations that reflect and support the diversity of its students. The Jed Foundation in collaboration with The Steve Fund (2017) developed a framework specifically for health promotion for students of color, called the *Equity in Mental Health Framework,* after polling over 1,000 college students of color on their mental health and relationship to the campus community, and reviewing literature to address gaps in addressing the mental health needs of students of color. The risk for various student groups may vary on each college campus and

rates of suicidal ideation per group could vary with each incoming cohort as Shadick & Akhter (2014) demonstrated. The risk for suicidal behaviors could increase when a person's individual identity intersects with multiple minority statuses (Meyer, 2010), such as race/ethnicity and sexual orientation or gender identity. For instance, Shadick, Dagirmanjian, and Bardot (2015) found that among first-year college students at a large university, students who identified as Lesbian, Gay, or Bisexual (LGB) were associated with higher risk than their heterosexual peers, students of color were a slightly lower risk, but students of color who also identified as LGB were at an elevated suicide risk compared to their heterosexual counterparts.

The use of gatekeeping interventions in communities of color have been found to be the most effective when targeted toward members of the social networks that individuals are the most comfortable seeking help from (Wong, Maffini, and Shin, 2014). Given this, it seems important to mention that who is trained as a gatekeeper matters, meaning demographic consideration should be given to recruitment of gatekeepers, and active recruitment within certain student populations that may be more at risk is crucial. To illustrate why this is important, consider the following hypothetical example: 'A transgender man who is Asian American and has a history of depression was just the target of a race-related incident on campus, and was recently kicked out of his family's home after coming out as transgender. He is currently sleeping in his car and his grades have started to drop. He has begun to experience suicidal ideation for the third time in his life and has been thinking about ways to kill himself. He is distrustful of faculty and staff because he feels persons in authority will let him down or shame him, possibly partially due to his recent experiences within his own family. He feels isolated on his predominantly white campus and has decided to try to keep to himself in his

classes but does participate in an Asian American student group and interacts with a few LGBTQ identified students on campus.'

It seems that the likelihood this student would share his distress with faculty or staff is low given his recent experiences and distrust for authority figures in this hypothetical scenario above. If the only gatekeepers trained on campus are faculty and staff, and students who are white and/or heterosexual, then the likelihood that this student will be recognized as in distress and referred for mental health services is extremely low given his recent experiences with racism by white students and his distrust of faculty and staff. However, if students within the LGBTQ community and the Asian American community have received gatekeeper training, then it becomes more likely that his depressive symptoms and warning signs for suicide will be recognized if he confides in a trusted peer within one of these communities, or if a peer recognizes the changes in his mental health and approaches him, which increases the chance that he receives the mental health support he needs. This hypothetical case illustrates the importance of training culturally diverse gatekeepers, which may require a more pro-active recruitment approach for gatekeepers vs. basic self-selection of gatekeepers.

Historically, theories of suicide and suicide prevention interventions that target heterogeneous groups largely leave out cultural considerations (Joe, Canetto, & Romer 2008; Leong & Leach, 2009; Chu, Goldblum, Floyd, & Bongar, 2010; Wong, Maffini, & Shin, 2014). In a review of cultural adaptation to interventions, Smith and Griner (2006) found that cultural adaptation was effective in improving mental health outcomes, and that "Multicultural adaptations to mental health interventions may be more efficacious than interventions without any cultural adaptation." (p. 23). Increasingly, studies have called for the necessity to develop tailored interventions for minority populations such as students of color, LGBTQ, veterans, etc.

(Brownson et al., 2014; Goldston et al., 2008; Czyz et al., 2013; Downs &Eisenberg, 2012; Hunt & Eisenberg, 2010). This call to action has been met with three more recent works to develop theories of suicide that include culturally-specific factors, including, the *Cultural Theory and Model of Suicide* (Chu, Goldblum, Floyd, and Bongar, 2010), the *Cultural Assessment for Suicide (CARS) Measure* (Chu, Floyd, Diep, Pardo, Goldblum, and Bongar, 2013), which is a measure for suicide risk based on the theory mentioned first; and most recently, the *Racial Cultural Framework* (Wong, Maffini, Shin, 2014). These recent developments can inform existing suicide prevention efforts, and hopefully new interventions can be developed that are grounded in theory about specific cultural factors related to suicide.

After developing a comprehensive suicide prevention toolkit that addressed cultural variations of risk by racial/ethnic and LGBTQ college students, Shadik and Akhter (2014) saw a 12% increase in minority students (including LGBTQ) receiving referrals for their counseling center, which they were able to conclude resulted from their cultural adaptation to outreach because the counseling center only saw a 3% increase in utilization of services overall. This is evidence that tailoring prevention interventions to different cultural groups on a college campus is important and needed. Although Shadik and Akhter (2014) reported their toolkit has been listed with the Suicide Prevention Resource Center's Best Practices Registry, it does not appear to be widely used by college campuses to address the needs of diverse students yet. Additionally, their toolkit was created in 2005, so was not designed from the basis of the theory and framework mentioned above, but this is not to say it is not effective, because their research demonstrates it has been effective in reaching culturally diverse student groups on their college campus. However, to address the call to create cultural adaptation to suicide prevention interventions that are grounded in research and theory, the rest of this paper will be dedicated to

a discussion on how to adapt the use of an existing gatekeeper training program, Campus Connect, to address the needs of diverse student populations on college campuses, that is informed by an empirically derived theory and framework.

Discussion

The purpose of this paper is to highlight the critical need for cultural adaptation when implementing broad, community-based suicide prevention interventions on college campuses. It is important to remember that while the generalizations regarding risk factors for suicidal behaviors gleaned from research may be true for groups overall, generalizations of cultural groups are never appropriate to apply to an individual, and individual differences should always be considered when working with someone from any cultural group. Applying the *Cultural Theory and Model of Suicide* to the Campus Connect gatekeeper training program is one way that colleges could increase their cultural competence to meet the needs of diverse groups of college students. A discussion of the importance of the *Model* follows, and recommendations for how to apply this knowledge to Campus Connect can be found at the end of this paper in the future recommendations section. One size does not fit all when it comes to suicide risk and protective factors of culturally diverse individuals, nor should a one-size approach be used to meet the needs of a diverse student body.

The *Cultural Theory and Model of Suicide* (Chu, Goldblum, Floyd, & Bongar, 2010) was developed as a model to address cultural considerations related to suicide for four minority groups: African American/Black, Asian American, Latinx/Hispanic American, and members of the LGBTQ community. Based off of a meta-analysis of existing research on cultural factors related to suicide risk, this model derived four factors that accounted for 93% of the data on culturally-specific suicide risk for these populations: (a) Cultural sanctions, (b) Idioms of

distress, (c) Minority stress, and (d) Social discord. They defined these cultural factors "to include beliefs, values, norms, practices, or customs held by ethnic and sexual minority groups that have been shown to influence suicidality" (p. 9). These factors informed the development of three principles related to culture and suicide: (a) "Culture affects how suicidal thoughts, intent, plans, and attempts are expressed" (p. 28). (b) "Culture affects the types of stressors that lead to suicidal behavior" (p. 28). (c) "Cultural meanings associated with stressors and suicide affect the development of suicidal tendencies, one's threshold of tolerance for psychological pain, and a subsequent suicidal act" (p. 28).

The first principle ("culture affects how suicidal thoughts, intent, plans, and attempts are expressed") is related to the factor of "idioms of distress," and informs how suicidal intent may be disclosed, or not disclosed (i.e. the notion of some ethnic minority populations as "hidden ideators"), and the type of means for a suicide attempt that may be selected (i.e. household poison, firearm, or hanging). For example, recent CDC (2015) data reveals that the most common method for suicide among non-Hispanic Black and White young adults (18-24) was firearms, followed by suffocation; for Hispanic/Latinx, Asian/Pacific Islander American, and American Indian/Alaska Native the most common method used was suffocation, followed by firearms; the use of poison and falls was a more common method for Asian/Pacific Islander American than among other race/ethnicity groups (12.6% vs 8.1% of deaths).

The second principle ("culture affects the types of stressors that lead to suicidal behavior") informs the potential vulnerability for suicidal ideation, plan, or intent, that could be increased by the interactions between "minority stress," "cultural sanctions," or "social discord," among other risk and protective factors. Studies have been completed that demonstrate minority stress and social discord can be risk factors for suicidal behavior (Arria et al., 2009; Baams,

Grossman, & Russell, 2015; Wong, Koo, Tran, Chiu, & Mok, 2011). In a review of literature on the relationship of culture and mental illness stigma among Americans of Native/American Indian, Asian, African, Latinx, Middle Eastern, and European descent, the authors found that there are various cultural group differences in stigma, and that cultural values have an important relationship with stigma, especially for African American and Asian Americans, but explanations for the reasons why there are differences is not entirely known (Abdullah & Brown, 2011).

The third principle ("cultural meanings associated with stressors and suicide affect the development of suicidal tendencies, one's threshold of tolerance for psychological pain, and a subsequent suicidal act") relates to "cultural sanctions" and how a stressor associated with messages of acceptability could impact suicidal behavior. Cultural sanctions can have a bidirectional effect, meaning that they can influence the belief of suicide as unacceptable ever or convey the belief that there may be instances when a suicidal act is acceptable. Marion and Range (2003) found that views of suicide as unacceptable among Black female college students actually predicted lower suicidal ideation. Marcenko, Fishman, and Friedman (1999) found that Black, Latinx, and White high school students that demonstrated greater tolerance towards suicide also had higher levels of suicidal ideation. Grossman, Park, and Russell (2016) found that there were fewer suicide attempts among transgender/gender non-conforming youth who reported having a religion and higher frequency of religious services attendance, which suggests that in spite of minority stress that accompanies this gender identity, religion served as a protective factor. Walker and colleagues (2008) found that acculturative stress and less attachment to their ethnic identity was associated with vulnerability for suicidal ideation in African American/Black but not White college students.

A recent study to determine cultural motives for suicide in Latinx, Asian American, and Whites yielded an empirical model of six cultural meanings related to themes for motives of suicide; these themes included mental health/medical, interpersonal, intrapersonal behavior, intrapersonal perceptions, intrapersonal emotions, and external environment (Chu et al., 2017). The top three most endorsed themes follow. Intrapersonal perceptions were endorsed the most (59% of the total sample), and consisted of "cognitive factors such as hopelessness, meaninglessness, perception of no way out, negative self-perception, and dissatisfaction with life" (p. 1349). The second most endorsed theme were Interpersonal themes (45.7%) such as "negative feelings elicited by interpersonal problems such as lack of belonging, perceived burdensomeness, and low social support" (p. 1349). The third most endorsed theme were mental health and medical themes (35.8%) related to "psychological and physical problems such as mental illness and chronic physical illness" (p. 1349). The authors found that the cultural meaning via motives for suicide was most different for the Latinx participants, who were less likely to endorse motives for suicide related to maladaptive thoughts. Both Asian American and White American participants endorsed Intrapersonal perceptions (i.e. hopelessness, negative self-perception, etc.) more frequently than Latinx participants, who endorsed the Interpersonal themes as the most common motive. This article has important implications for suicide prevention on the community level as well as for the individual clinician when assessing for risk.

A critical missing group from the *Cultural Theory and Model of Suicide* is the inclusion of American Indians/Alaska Natives, which is unfortunate due to the high rates of suicide within some of their communities, however it is important to note that this group is not by any means homogenous, and suicide rates vary dramatically between various tribal nations. One study found similar rates of suicidal ideation among Native American college students and the general

population, and posited that these students may be a "distinct subset" (p. 285) of Native American adolescents and youth; they also cautioned on the generalizability of this finding based off of one study (Scheel, Prieto, & Bierman, 2011). The authors of the *Cultural Theory and Model of Suicide* explained that "It was necessary to include minority status groups with sufficient available data related to culture and suicide" (Chu, Goldblum, Floyd, & Bongar, 2010, p. 7), which suggests there is a need to collect more information on the suicidal behavior of the diverse groups of American Indian/Alaska Natives (including college students) so they can be included in this model.

Muehlenkamp and colleagues (2009) wrote an article where they discussed the successful implementation of a suicide prevention model for Northern Plains American Indian college students with specific cultural adaptations using the medicine wheel as a guiding framework, which they integrated into the larger campus suicide prevention program. The article discusses the obstacles faced and the solutions created for implementation and include suggestions for establishing this American Indian-specific prevention program on other college campuses. For more information on the success of this adaptation, refer to Muehlenkamp, Marrone, Gray, and Brown (2009) in the references section of this paper. There is also an article written by some of these same authors that provides a case description of one Native student from that campus and how this adaptation met the student's cultural needs while addressing their experience of suicidal ideation (Gray & Muehlenkamp, 2010). If researchers are willing to collaborate with each other then perhaps more inclusive interventions that are culturally sensitive could be developed to meet the needs of an ever-diversifying college student population.

Utilizing the *Cultural Theory and Model of Suicide* to inform the Campus Connect gatekeeper training program is one way college campuses could meet the need for a more

culturally inclusive suicide prevention intervention. As previously discussed, Campus Connect (CC) Gatekeeper Trainings is a suicide prevention program developed specifically for college campuses to train campus community members as gatekeepers in order to increase their knowledge of and ability to recognize warning signs of suicide, build communication and listening skills through experiential learning in order to establish a relationship with the distressed person, and increase the knowledge of resources in order to refer students in distress to professional clinicians.

Limitations

This is a theoretical paper addressing gaps between the scant (but increasing) research on cultural considerations of suicidal behavior and college campuses' public health approach to suicide prevention efforts, which are largely devoid of cultural adaptation. The public health approach to suicide prevention is a broad population-based intervention and requires additional effort be put into cultural adaptation when used in a heterogeneous group of people with various cultural backgrounds, such as on diverse college campuses. If this is not done, and knowledge of suicide warning signs is primarily based on white majority norms, then it is likely there are critical gaps in the intervention and this results in a failure to address the needs of students of color, and LGBTQ youth. Since this is a theoretical paper there is no data to support the claim that cultural adaptation to gatekeeper trainings will meet the needs of diverse students on college campuses by reducing suicidal behavior. Instead the author relied on other studies that have been completed that support the case that there is a need for such adaptation to suicide prevention interventions. More empirical research is needed to inform existing suicide prevention programs and address the cultural needs of increasingly diverse student bodies on college campuses, and elsewhere.

Future Recommendations

The three principals established from the theoretical framework from the *Cultural Theory and Model of Suicide* can inform the Campus Connect Gatekeeper Training to improve its cultural application. The first principal states, "Culture affects how suicidal thoughts, intent, plans, and attempts are expressed." Campus Connect gatekeeper trainings on individual college campuses should incorporate not only the knowledge of general risk factors and warning signs for the general population but also specific risk factors for different ethnic and racial minority populations, in addition to the campus data. Generalizability of cultural risk factors should be balanced with an understanding of an individual, the intersection of their identities, protective and risk factors, and their individual sociocultural context. It is also important to keep in mind that some risk factors may be prominent in one community in a certain state, yet not in another due to other factors such as SES, or the protective factor of a strong community. For students traveling from out of state, they may be bringing with them the specific risk and protective factors from their home communities, rather than the college campus community they are joining.

The second principal states, "Culture affects the types of stressors that lead to suicidal behavior." Incorporating the knowledge that has been presented can inform the mental health promotion efforts of college campuses, and their gatekeepers. Awareness of how different stressors may impact diverse individuals is critical, and ultimately starting the conversation with someone is the best way to discern if there is risk, and how much there is. Having awareness of the differential impact that family relationships may have on an individual, and their peer relationships and sense of connection to community are important concepts to consider. Also, a general awareness around cultural sanctions regarding suicidal behavior can

help to inform intervention with the individual who is at-risk, in addition to addressing risk factors within cultural groups.

The third principal states, "Cultural meanings associated with stressors and suicide affect the development of suicidal tendencies, one's threshold of tolerance for psychological pain, and a subsequent suicidal act." Reinforcing the foundation and importance of cultural communities on campus, while also creating cross-cultural relationships can create an important pathway to securing support for students on campus. Creating a sense of belonging could be a protective factor, and students who feel connected to others are more likely to share their distress with someone.

Two major racial/ethnic groups are glaringly missing from the *Cultural Model of Suicide*. Further development of the *Cultural Model of Suicide* should be considered in relation to American Indian/Alaska Native and Middle Eastern/Muslim populations. Including these populations within a cultural model is crucial for comprehensive understanding of the interplay between culturr and risk factors for suicide. From a social justice perspective, it seems important to have a model that is inclusive of all racial/ethnic groups that are likely to be present on college campuses. More research should be conducted on these two groups in a way consistent with the Model's study design in order to add these major ethnic groups to the Model.

The Shadick and Akhtel tool kit mentioned earlier in this paper should be examined by college campuses to consider incorporating with their own suicide prevention efforts. Specifically, the tool kit was designed with subsections of materials for campus-specific and general information pertaining to the mental health and suicidal behaviors of different ethnic/minority populations on campus so that specific information and recommendations for various cultural groups could be utilized and tailored to the audience being trained. Having

specific information for different cultural groups is important for the dissemination of knowledge, and to better equip campus gatekeepers with the tools necessary to recognize warning signs of diverse populations of college students.

Colleges can utilize surveys, such as the Healthy Minds Study, The Center for Collegiate Mental Health, or American College Health Association to help identify their own campus needs, and populations that may be at higher risk, in addition to creating their own surveys and focus groups to address campus-specific needs of different cultural groups. If creating focus groups, college campuses should be intentional in enlisting student leaders that represent racial/ethnic and other cultural groups (such as LGBTQ and veterans) on campus whenever possible to represent diverse student populations, as well as staff members that might belong to these populations. The location of focus groups should be in a neutral location or gathering place for these students in order to create a sense of security in participation by reducing the perceived stigma that may be associated with a formal mental health center**.**

Integrating knowledge from the *Cultural Model and Theory of Suicide* with the JED Foundation *Comprehensive Approach to Suicide Prevention and Mental Health Promotion* (MHAP; Jed Foundation, 2006, 2012) and the *Equity in Mental Health Framework* (The Steve Fund, 2017) can assist colleges in investigating key cultural factors for diverse college students' suicidal behaviors and developing protocols for how to address these concerns. Providing data on the risk factors for specific cultural groups within a campus community can establish credibility in the eyes of the campus community. Furthermore, efforts to reduce biases of gatekeepers and staff through diversity trainings and education can reduce the critical failure to refer students of color, and hopefully diverse students' experience of discrimination.

Gatekeeper Trainings should be provided on an annual basis for staff who work directly with students and should include key student leaders that are representative of the cultural groups on a college campus. Counseling staff and other invested faculty or staff in mental health fields should be trained as trainers, and gatekeeper trainings should be provided to all incoming first year students at both the undergraduate and graduate levels (including international students). This recommendation could address two identified problems in this paper. First, students may be more likely to tell a friend or other peer than to tell a staff or faculty member about their suicidal ideation. This trusted source may be more likely a member of the student's own racial/ethnic group. Training more students and staff or faculty members from diverse groups increases the likelihood that warning signs for suicide will be recognized and appropriate referrals can be made. Second, students of color may be less likely to be referred for mental health services by the first person they disclose suicidal ideation to. If students from diverse cultural backgrounds are included in the gatekeeper trainings, this increases the likelihood that students from various racial/ethnic backgrounds with mental health concerns will come in contact with a gatekeeper from their cultural background. This is further reinforced if all first-year students receive gatekeeper trainings. Furthermore, educating the general campus community will invariably reduce personal perceived stigma on campuses, and increase the likelihood that students of color, LGBTQ, and international students have access to a peer with cultural knowledge on specific risk factors and correlates of suicidal behaviors, and who can be a source of referral for a student in distress.

It is recognized that this approach could require more resources than currently available on some college campuses. An alternative to training all incoming first-year and graduate students could be to ensure buy-in and training of key members from Affinity Groups

(e.g. Black Student Alliance, Queer Straight Alliance, Native Student Alliance, Latino Student Alliance, International groups, etc.; names of Affinity groups may vary by campus) on an annual basis to ensure that there are knowledgeable gatekeepers representative of the various cultural communities on a specific college campus.

In the case of college campus public health approaches to suicide prevention interventions, one size does not fit all. It is important to apply an understanding of the concept of intersectionality when providing suicide prevention interventions. Failing to address culture-specific risk factors pertaining to ethnicity, race, sexual orientation or gender identity, and other cultural factors will not meet the needs of a diverse student body. It is important to maintain cultural sensitivity regarding information about suicide that is being shared. There may be some reluctance to disclose suicidal ideation based on the taboo in some cultures of sharing intimate details of family life, which could be frowned upon. Exploring this with students is necessary. Specific risk factors for suicidal behavior that have been identified throughout this paper for diverse groups of students include:

- *For all students of color and LGBTQ students, awareness of the potential negative impact on mental health via experiences of discrimination and acculturative stress should be included in gatekeeper trainings and health promotion activities.* Studies have shown that suicidal behavior can emerge in the absence of mental health concerns due to negative interpersonal experiences (primarily family relationships), acculturative stress, or experiences of discrimination, and these are important factors to keep in mind when working with diverse students. Therefore, it cannot be assumed that since a student does not meet criteria for a diagnosis (i.e. depression) that means there is no risk for suicide.

- *Students with multiple marginalized identities may face multiple forms of oppression and discrimination that could potentially increase risk factors for suicidal behavior, depending on the student's experience.* For example, a student may present as white, who is actually bi- or multiethnic/multiracial, and an LGBTQ student may be assessed as a white student but has the added stressor of possible experiences of discrimination due to LGBTQ status. Studies have demonstrated an increased risk for suicidal behaviors among students with multiple cultural identities.
- *It is important to assess risk for suicide via multiple mediums (i.e. questionnaires and in-person verbal dialogue), and through multiple ways of asking an individual.* The notion of Asian American students as "hidden ideators" is an assumption that may not be entirely correct and begs the question as to whether the ideation is hidden or if the proper questions were not asked. Additionally, Asian students may experience higher acculturative stress than other groups of students. Acculturative stress and perceived discrimination could be potential risk factors for suicidal behavior.
- *For LGBTQ youth, discrimination, family alienation, substance abuse, and lack of a supportive community may increase the risk of suicidal behavior.* Although LGBTQ youth access health services at higher rates than the general population, retention is not always good; this is sometimes due to providers who lack competence in providing services for these youth. Efforts to increase the competency of mental health staff with this population is necessary.
- *More efforts should focus on cross-cultural connections and support for the International student body and the student body born in the United States in order to foster meaningful relationships.* For International students, maintaining a sense of connection to family and

culture while studying abroad is important, and increasing the sense of connection to the campus they are studying at is crucial. Both groups of students could learn so much from each other.

- *For Latinx students, the notion of risk factors and warning signs should include considerations of how social and environmental stressors can impact mental health and negative experiences with these factors could be a possible trigger for suicidal behavior.* The concept of thwarted belongingness may hold true for both white students and Hispanic/Latinx students in relation to suicidal behavior, but perceived burdensomeness may not be a good indicator for Latinx students, thus the Interpersonal Psychological Theory of Suicide may not hold completely true for students of diverse backgrounds, and this should be kept in mind when assessing for suicide risk.
- *For Black or African American students, acculturative stress, perceived discrimination, and lack of connection to their cultural communities could increase the risk for suicidal behavior.* Given the current social climate in America and increasingly revealed police brutality via social media, a distrust of formal systems of care could be reinforced for these students. Specific outreach to Affinity groups and efforts to reduce systemic barriers to counseling are needed, along with efforts to reduce mental health stigma, and gatekeeper trainings.
- *Colleges could refer to Muehlenkamp and colleagues (2009), who developed a successful suicide prevention program specific to Native American (American Indian/Alaska Native) college students that was also integrated into the larger university suicide prevention program, to learn how they can incorporate elements of this program for their own campus prevention efforts.* It is important to consider the impact of historical trauma on

Native college students. Moving away from their communities could potentially have a negative impact on their mental health and this could be compounded if something happens in their home community while they are away. Experiences of discrimination and a sense of isolation could also impact mental health. For colleges with larger Native student populations, collaboration with community leaders would be helpful, as well as creating a referral list of Native mental health providers within the community for students who prefer to work with a Native therapist.

- *As previously stated, gatekeeper training recruitment should occur within all of these communities on a college campus, along with key staff and faculty, to ensure knowledge of suicide warning signs and enhance the likelihood of referrals.* This should be done in a culturally sensitive way, and there should be detailed facts pertaining to the specific cultural group as well as campus-specific data whenever possible.

Conclusion

Suicide is the second leading cause of death for adolescents and young adults ages 15 to 34, including college students. College campuses have taken steps to address the risk for suicide among their diverse student body (including racial/ethnic diversity and sexual or gender minority youth) by taking a public health approach, including gatekeeper trainings, to increase recognition of warning signs for suicidal behavior and increase general knowledge of referral resources. The *Cultural Theory and Model of Suicide* is a viable framework to inform suicide prevention efforts on college campuses, including gatekeeper trainings such as *Campus Connect*, which was designed specifically for college student populations. While population-based approaches to suicide prevention are useful because of their far-reaching impact, a one-size fits all approach most likely fails to address the needs of students from diverse backgrounds. Efforts to prevent

suicide on college campuses should be culturally informed and inclusive of the many cultural groups represented within diverse student bodies. This requires additional programming and outreach to specific cultural groups on college campuses and simultaneously infusing existing prevention efforts with increased cultural knowledge of suicide warning signs and risk factors. This could strengthen existing suicide prevention efforts and create a more inclusive approach to address the diverse needs of students from many different cultural backgrounds.

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