Enhancing College Students' Mental Health: Contributions from the Perspective of Community Psychology
Kim Skerven, MSW, Ph.D.

INTRODUCTION
This paper, through an integrated literature review, seeks to understand the current status of mental health in U.S. college and university students, and to use the lens of community psychology as a way of exploring viable interventions with the potential of enhancing students' psychological well-being and, in turn, their overall success in college. In his overview of the past 100 years of college mental health, Kraft (2011) traces the evolution of mental health care on college campuses in the United States across the decades. He notes that recent tragic events on college campuses such as Virginia Tech and Northern Illinois University have increased attention to the psychological health of students across the country. We are at a point of accumulating evidence of significant need in this area, which offers an opportunity for creative resourcefulness and for using research evidence to inform best practices.

There are a number of important reasons why this particular phase of psychological development (the college years) is of concern when thinking about psychosocial well-being. First, as pointed out by Mitchell, Kader, Haggerty, Bakhai, and Warren (2013), these years “correspond with the peak onset of mental health symptoms in the general population” (p. 49). That is, the age of traditional college students (18-25) aligns with the typical age of onset for a range of psychological disorders. Additionally, the transition to and from college represents a unique stressor for many students. This transition has the potential to expose students to factors—such as the availability of alcohol and other drugs, change in sleep patterns, and adjustment to a new social environment—that increase risk for the development or exacerbation of existing mental health problems (Cleary, Walter, & Jackson, 2011). Also, as students strive to balance their academic work with other adult roles (e.g., family, jobs), “stress spillover” from one domain to another can negatively impact overall mental health (Pedersen, 2012). Some consequences of this include negative academic performance and potential withdrawal from school.

This author chose to approach the topic of college student mental health from the perspective of community psychology for several reasons. First, community psychology’s keen attention to the transactions that occur between individuals and the surrounding social milieu provides a contextualized means of understanding the problem and also of generating potential solutions. The environment to which university and college students are exposed is certainly unique. Thus, it makes sense that the approach of community psychology would hold promise in terms of deeply understanding how the daily experiences of students relate to their psychosocial well-being. Next, community psychology is concerned with prevention as opposed to reacting to problems after they have emerged. And while this approach is certainly challenging, it is also clear that prevention would decrease suffering. Finally, the ecological models used by community psychology are helpful in terms of identifying specific intervention points that move beyond the individual and extend into multiple domains of functioning.

Additional information pertaining to community psychology is woven throughout this paper, as it serves as the guiding framework for the discussion. To begin, the current status of mental health in U.S. college and university students is presented. This is followed by issues related to treatment seeking and barriers to accessing help. Then, focus is given to the ways in which student diversity relates to the central question of mental health. Finally, an ecological framework is used to organize potential intervention strategies. We begin with an examination of current mental health data.
CURRENT TRENDS
College and university counseling centers across the
United States are faced with the task of providing
support and treatment for a broad range of problems
that impact students’ academic functioning and
beyond (Erdur-Baker, Barrow, Aberson, & Draper,
2006). Based on her review of the literature, Kitzrow
(2003) argues that the number of students with
serious mental health concerns is growing, and this
concern has been echoed by other authors (Hunt &
Eisenberg, 2010; Yorgason, Linville, & Zitzman,
2008). Kitzrow also addresses issues such as
increased severity of mental health problems among
students and the implications of a burgeoning
demand for psychological services on college
campuses. Likewise, Castillo and Schwartz (2013)
assert that counseling center staff have noted
heightened symptom severity as well as a significant
increase in treatment seeking by college students. It
is apparent, based on current literature, that as
colleges and universities across the nation continue
to address factors that may negatively impact
students’ ability to succeed, attention must be given
to the issue of mental health.

As an example, Zivin, Eisenberg, Gollust, and
Golberstein (2009) used longitudinal methodology to
create an account of student mental health over the
course of two years. These investigators collected
data in 2005 and again in 2007, noting changes over
time. Their results, using a sample of more than 700
college students, revealed the following trends:

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td>Positive screen for anxiety</td>
<td>4.75%</td>
<td>6.97%</td>
</tr>
<tr>
<td>Positive screen for eating disorder</td>
<td>18.27%</td>
<td>18.93%</td>
</tr>
<tr>
<td>Reported self-injury</td>
<td>9.90%</td>
<td>13.93%</td>
</tr>
<tr>
<td>Reported suicidal thoughts</td>
<td>2.77%</td>
<td>6.45%</td>
</tr>
<tr>
<td>Participated in treatment</td>
<td>17.65%</td>
<td>25.36%</td>
</tr>
<tr>
<td>Perceived need for treatment</td>
<td>32.93%</td>
<td>42.87%</td>
</tr>
<tr>
<td>Positive screen for depression</td>
<td>15.36%</td>
<td>12.93%</td>
</tr>
</tbody>
</table>
(Zivin et al., 2009)

In this study, a noteworthy percentage of students
reported that they perceived a need for mental health
treatment (32.93% in 2005, 42.87% in 2007), while
only a portion of those students actually participated
in treatment (17.65% in 2005, 25.36% in 2007) (Zivin
et al.). This work introduces the question of whether
all students in need of mental health services are
accessing them.

Also investigating mental health need on college and
university campuses, the American College Health
Association (2012) facilitated a large-scale data
collection and presented the results in its National
College Health Assessment report. This survey
included more than 90,000 respondents from
institutions across the country, and included a wide
variety of mental health–related questions. The report
was organized by specific psychological and
substance abuse concerns. The breakdowns are
presented below.

First are several items related to depression. The
following percentages apply to students who met
each criterion at least once in the past 12 months:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
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<tbody>
<tr>
<td>Felt things were hopeless</td>
<td>38.3%</td>
<td>48.8%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Felt exhausted (not from physical activity)</td>
<td>73.2%</td>
<td>86.1%</td>
<td>81.6%</td>
</tr>
<tr>
<td>Felt very lonely</td>
<td>49.9%</td>
<td>61.2%</td>
<td>57.3%</td>
</tr>
<tr>
<td>Felt very sad</td>
<td>51.0%</td>
<td>66.3%</td>
<td>61.0%</td>
</tr>
<tr>
<td>Felt so depressed that it was difficult to function</td>
<td>26.7%</td>
<td>33.4%</td>
<td>31.3%</td>
</tr>
</tbody>
</table>
(American College Health Association [ACHA], 2012)

They also included questions pertaining to suicidal
ideation and self-harm behaviors, as reported below:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seriously considered suicide</td>
<td>6.7%</td>
<td>7.2%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>1.1%</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Intentionally injured yourself</td>
<td>3.9%</td>
<td>6.2%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>
(ACHA, 2012)
Finally, they reported data pertaining to anxiety:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt overwhelmed by</td>
<td>77.2%</td>
<td>91.0%</td>
<td>86.1%</td>
</tr>
<tr>
<td>all you had to do</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felt overwhelming</td>
<td>40.0%</td>
<td>56.3%</td>
<td>50.7%</td>
</tr>
<tr>
<td>anxiety</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(ACHA, 2012)

In addition to asking about students' experiences with mood and anxiety problems, the survey inquired whether in the past 12 months respondents had been formally diagnosed or treated by a professional for specific mental health problems. The following data were obtained:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anorexia</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>6.9%</td>
<td>14.5%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Attention deficit/hyperactivity disorder</td>
<td>5.0%</td>
<td>4.1%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>1.3%</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Bulimia</td>
<td>0.5%</td>
<td>1.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Depression</td>
<td>6.9%</td>
<td>12.9%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Insomnia</td>
<td>3.0%</td>
<td>4.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Obsessive compulsive</td>
<td>1.5%</td>
<td>2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panic attacks</td>
<td>2.6%</td>
<td>6.9%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>0.4%</td>
<td>0.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Substance abuse or addiction</td>
<td>1.4%</td>
<td>0.8%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

(ACHA, 2012)

The report also provided data on substance use over the past 30 days:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>67.1%</td>
<td>65.5%</td>
<td>65.9%</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>17.5%</td>
<td>12.5%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>19.3%</td>
<td>14.1%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Tobacco from a water pipe (hookah)</td>
<td>9.5%</td>
<td>6.5%</td>
<td>7.6%</td>
</tr>
<tr>
<td>All other drugs</td>
<td>20.7%</td>
<td>9.1%</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

(ACHA, 2012)

Interestingly, the survey also asked students to report on the perceived use of substances on campus—that is, what students believed the "typical" student on campus used. Overall, these numbers were: 94.7% (alcohol), 80.8% (cigarettes), 81.8% (marijuana), 67.8% (tobacco from a water pipe), and 75.6% (all other drugs). This suggests that students are overestimating the frequency of other students' use or underreporting their own use (or both).

The report also provides information that is relevant to binge drinking. Of note are the differences between men and women when asked to report the number of drinks consumed the last time they "partied":

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 or fewer</td>
<td>44.6%</td>
<td>64.8%</td>
<td>57.8%</td>
</tr>
<tr>
<td>5</td>
<td>10.4%</td>
<td>12.0%</td>
<td>11.4%</td>
</tr>
<tr>
<td>6</td>
<td>9.4%</td>
<td>8.4%</td>
<td>8.7%</td>
</tr>
<tr>
<td>7 or more</td>
<td>35.6%</td>
<td>14.9%</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

(ACHA, 2012)
Finally, students were asked which factors had negatively influenced their academic performance over the past 12 months. Several of these influential factors related to mental health and substance abuse: alcohol use (4.5%), anxiety (20.2%), physical assault (0.6%), sexual assault (0.8%), attention deficit/hyperactivity disorder (5.1%), concern for a troubled friend or family member (11.1%), death of a friend or family member (5.8%), discrimination (1.0%), drug use (1.7%), eating disorder (1.1%), homesickness (3.9%), learning disability (3.0%), relationship difficulties (10.4%), roommate difficulties (5.8%), sleep difficulties (20.6%), and stress (29.0%) (American College Health Association, 2012).

Taken together, the literature does support the assertion that college and university campuses are faced with a significant challenge. A substantial number of students report mental health concerns that directly impact their academic and overall functioning. Further complicating the matter is the fact that there exists a wide range of issues that require attention, including substance abuse, eating disorders, depression, stress, and anxiety. The stakes are high: suicide is the second leading cause of death among college students (Cleary et al., 2011). Additionally, it appears that there may be a substantial portion of students who are in need of services but who for some reason do not access them. Following this line of inquiry, the next section delves into the question of service utilization and potential barriers to accessing treatment.

**FREQUENCY OF SERVICE UTILIZATION**

Given the level of mental health concerns on campus, one must consider the related issue of frequency of psychological service utilization by college and university students. Among other important consequences, this has strong implications for on-campus programming. Since there seems to be a large number of students in need of services who are not accessing them, it would be helpful to create outreach programs in order to engage students. As an example, Cranford, Eisenberg, and Serras (2009) found that when looking at students with co-occurring mental health and substance abuse disorders, 67% reported a need for services and only 38% actually received them.

Further investigating this question, Yorgason, Linville, and Zitzman (2008) looked at a sample of more than 250 undergraduate students. They asked the students about their knowledge of mental health services on campus and found that 30% had absolutely no knowledge such services existed; 38% had heard of the services but knew nothing about them. About 17% of the sample had used the mental health services on campus. When asked about sources of information about counseling on campus, the top source was a friend/fellow student, followed by advertisements and the Internet; student orientation programming was fifth on the list; faculty was sixth.

Yorgason et al. (2008) also sought to understand what was happening with the subset of students who reported high distress and knew about the services but still did not use them. They reported that sex was a significant demographic predictor, with male students being much less likely to seek services. When researchers asked about the reasons why students who were in distress did not seek help on campus, the top responses were: not enough time, lack of knowledge, embarrassed, did not think it would help, and lack of motivation. The authors offer some strategies to help reach more students in need, including improving dissemination of information about available counseling on campus.

Next, Eisenberg, Hunt, and Speer (2012) further this argument through their work with the Healthy Minds Study, which includes data from students representing more than 75 campuses. These authors investigated help-seeking behaviors on college and university campuses, and as part of their literature review they provide an overview of the correlates and prevalence of help seeking by students. Based on national data, the authors noted that less than 20% of college students with a mental health disorder actually received treatment. Further, less than 50% of students who had seriously considered suicide received professional help.

This data revealed that for students in treatment for depression, “only about half received care at or above levels considered minimally adequate according to evidence-based guidelines” (Eisenberg et al., 2012, p. 224). Additionally, sex differences were again noted in terms of treatment participation, with 39% of female students with mental health concerns receiving...
treatment compared to 30% of male students. Further, there were differences across racial groups; 40% of white students, 28% of Hispanic students, 26% of African American students, and 15% of Asian American students who needed treatment actually accessed it. This work suggests that attention to issues of diversity is important when considering on-campus intervention strategies.

Comparing college students with nonstudent populations, Hunt and Eisenberg (2010) explored the issue of help-seeking behavior through a literature review. Their work revealed a high prevalence of psychological disorders among college students, which was consistently echoed by counseling center staff members surveyed in research cited by the authors. The investigators pointed out that this may reflect higher willingness to seek help, and not necessarily increased prevalence and/or severity of mental illness on campus. And even with the potential increase in help seeking, Hunt and Eisenberg observed through the Healthy Minds Study that less than 50% of students with a positive screen for depression or anxiety actually received services in the past year. They also reported barriers to treatment access, including lack of time, being skeptical about treatment, and certain demographic factors, such as low socioeconomic status, international student status, and stigma about mental illness. In order to address some of these barriers, the authors described stigma-reduction campaigns and screening programs that have been put in place by some institutions.

Integrating work across multiple studies, Nam et al. (2013) conducted a meta-analysis on the topic of college students’ attitudes toward seeking help. The researchers located 19 studies that included a total of more than 7,000 participants. Interestingly, level of distress was not found to have a significant positive relation with help-seeking behavior, while anticipating benefit from treatment, high levels of self-disclosure, and social support did. Having a negative relation with help-seeking behavior were self-stigma, anticipated risk of treatment, public stigma, self-concealment, and depression. The authors noted that self-stigma had the largest effect: those with high levels of self-stigma had the most negative attitudes toward seeking help. Reducing the effects of stigma, then, seems to be an important factor for campuses to consider if they are to help students in need access the help available to them.

These meta-analysis data echo some of the themes identified by Eisenberg et al. (2012) in their paper using data from the Healthy Minds Study. The authors examined barriers to help seeking by college students, revealing some interesting trends. First, stigma and self-stigma, as discussed in the meta-analysis above, were noted to be significant barriers. Stigma refers to concerns about public perception, while self-stigma involves negative perceptions regarding help seeking by the individual. Both of these factors can function as barriers to help seeking. The authors suggested that stigma in particular may help explain why there are differences in help-seeking behaviors across various groups of students. Another important barrier was perceived need. That is, it appears that some students do not fully appreciate the fact that their mental health problem might warrant professional help. The authors reported reasons including beliefs such as: “their problem will get better by itself; stress is normal in college or graduate school; they question how serious their problem is; they prefer to handle their problem on their own; they do not have time to seek treatment” (p. 225). Additional barriers included social context (having social networks that do not support treatment), cultural competence (lack of culturally competent providers), and negative attitudes about treatment in general.

Clearly, university and college counseling centers are charged with supporting students and treating a wide variety of problems that can potentially impact academic performance (as well as other domains of functioning) in a negative manner. Additionally, multiple factors exist that may function as barriers to accessing help. Given this challenge, and the fact that diversity on college campuses has steadily increased over the decades (Kraft, 2011), it is apparent that many dimensions of students’ lives must be understood and taken into consideration when attempting to provide the best mental health care possible. Factors such as sex, race, and sexual orientation remind us that a one-dimensional approach to psychosocial intervention on campus is insufficient. In the next section, dimensions relevant to diversity are explored in order to achieve a greater depth of understanding of how differences among
students can translate to both challenges and opportunities for counseling centers.

ISSUES OF DIVERSITY
The analysis of current mental health trends, as well as the presence of barriers to accessing treatment, suggests that being mindful of issues related to diversity is critical. Campuses have seen increased diversity in multiple forms. International students, female students who are also single parents, and increased visibility of sexual minority students are just a few examples. Integration across dimensions of diversity through the adoption of an intersectional lens is wise, not only as a means of understanding the problem but also of creating solutions based on community integration and enhancement of existing resources. This aligns nicely with the values of community psychology, which seeks to understand the dynamics and outcomes of psychosocial oppression (Kloos et al., 2012). In this spirit, the following sections review some of the literature pertaining to diversity among university and college students, and how it relates to mental health and psychosocial functioning.

Sex: The data reported earlier from the American College Health Association (2012) demonstrated differences between male and female students for a number of mental health and substance abuse concerns. Overall, the association reported that 10.9% of students surveyed had been diagnosed with or treated for depression over the past year. This statistic is a bit higher than the national average, which is about 6.7% of U.S. adults in a given year (National Institute of Mental Health [NIMH], 2013a). The NIMH (2013a) also reports that women are 70% more likely than men to experience depression in their lifetime. Likewise, the American Psychiatric Association (2013) reports that beginning in adolescence, women are at a 2 to 3 times higher risk for depression than men. And this trend can be observed in the statistics reported by the American College Health Association (2012), in which 6.9% of male students and 12.9% of female students reported being diagnosed with or treated for depression in the past year. Female students also reported higher rates of intentional self-harm behavior (American College Health Association, 2012).

Additionally, American College Health Association (2012) data indicated a higher percentage of female students reporting anxiety problems. This aligns with data from the NIMH (2013b) indicating that women are 60% more likely than men to experience anxiety disorders over their lifetime. Finally, women in the American College Health Association (2012) study were about twice as likely to self-report the presence of an eating disorder. According to the American Psychiatric Association (2013), there is a 10:1 female-to-male ratio among clinical populations for eating disorders.

In looking at substance abuse patterns, a noteworthy trend in the American College Health Association (2012) data was that males generally self-reported higher substance abuse levels. This was particularly true in the “other drugs” category, which includes 13 subcategories, such as inhalants, MDMA, and hallucinogens. Here, 20.7% of males and 9.1% of females reported use in the last 30 days. These trends agree with data reported by the Substance Abuse and Mental Health Services Administration (2012).

Ethnic and Racial Minority Students: The issue of race and its relation to mental health has received increasing attention in the literature. As an initial access point, this author would like to offer an example. While working at a university counseling center several years ago, she received a referral from residence hall staff for a freshman, female African American student. The referral indicated that there were concerns that this student had an eating disorder because she did not show up for meals in the cafeteria. Upon meeting with and getting to know this student, the author realized that the student did not, in fact, have an eating disorder. The student was afraid to go to the cafeteria because she felt as though she did not fit in, as she was one of very few African American students living in that particular residence hall. Her behavior was driven by stigma and not by a disorder. This example stands as a reminder that, as is true on a broad social level, the effects of marginalization are powerful.

Numerous authors have approached the question of how stigma on college and university campuses may be implicated in the mental health treatment-seeking behaviors of students of color. For instance, Masuda, Anderson, and Edmonds (2012), concerned about
underuse of mental health services by students of color, examined help-seeking attitudes in a sample of more than 200 African American students. Their data indicated that for help-seeking attitudes, there was a negative association with mental health stigma and also self-concealment. The stigma associated with seeking mental health help was also investigated by Cheng, Kwan, and Sevig (2013), who focused on African American, Asian American, and Latino American students. These authors suggested that for all three of these groups, "higher levels of psychological distress and perceived racial/ethnic discrimination...predicted higher levels of perceived stigmatization by others for seeking psychological help" (p. 98). Furthermore, the external stigmatization was associated with higher levels of self-stigma for seeking help.

Using data from the Center for Collegiate Mental Health network, Hayes, Youn, et al. (2011) sought to better understand treatment barriers for students of color across 45 institutions in the United States. Results supported several predictors of mental health service utilization on campus. Of note, the authors observed that services did not seem to be underutilized by students of color. That is, service utilization rates mirrored enrollment at the institutions. But service utilization by White/Caucasian, Black/African American, Asian American, and Latino(a)/Hispanic students was predicted by the representation of staff from these particular ethnicities in the counseling center. In other words, help seeking among students of color was predicted both by the composition of the student body as well as by the composition of counseling center staff.

Finally, Cokley, McClain, Enciso, and Martinez (2013) considered an interesting variable in their research: imposter feelings in ethnic minority students. The authors explained that this phenomenon, initially researched among high-achieving women, pertains to one’s perception of self as an intellectual fraud: “Those with imposter feelings often live in fear of being exposed as a fraud and consequently hold themselves to exceptionally high standards” (p. 85). Consequently, it is reasonable to expect that this could result in increased stress and subsequent impairment in academic performance. Indeed, in their sample of more than 200 self-identified ethnic minority students, there was some support of this idea. They noted that the highest level of stress associated with minority status was apparent among African American students as compared to other minority groups. Furthermore, Asian American students were most likely to report imposter feelings. Overall, stress associated with minority status and also with imposter feelings was significantly linked with psychological distress. Interestingly, when the authors examined gender differences, none were found. So, the significance of minority stress and imposter feelings held for both male and female ethnic minority students.

**Sexual Minority Students:** In the general population, it appears that individuals with nonheterosexual sexual orientation are at greater lifetime risk of depression, anxiety, suicide attempts, and substance use disorders, as reported by King et al. (2008) in their meta-analysis of 25 studies. Nadal (2013), building on prior work that had been conducted on the topic of racial microaggressions, makes a compelling argument that predictable outcomes of societal heterosexism would include events such as antigay bullying and hate crimes, interpersonal discrimination, and harassment. These are examples of microaggressions related to sexual orientation. In his book, Nadal also makes the point that race and sexual orientation intersect, in that 70% of anti-LGBT murder victims are people of color. How does this social backdrop impact college and university students?

Using data from more than 25,000 students through the American College Health Association–National College Health Assessment, Oswalt and Wyatt (2011) explored mental health and associated academic performance in lesbian, gay, bisexual, and questioning (LGBQ) students. The authors framed the investigation in terms of unique challenges faced by LGBQ students, such as microaggressions described by Nadal (2013). The following percentages were reported within the timeframe of the past 12 months:
The authors connected this to students' academic performance. For instance, when asked whether symptoms of depression negatively impacted their work, significantly more sexual minority students endorsed this in forms such as: “lower grade on a project; lower grade in a class; incomplete or dropping a course; significant disruption of the thesis, dissertation, research, or practicum” (Oswalt & Wyatt, 2011, p. 1270). Finally, the authors reported that the most significant differences were found in items related to discrimination. That is, 96.1% of heterosexually identified students reported not experiencing discrimination, compared to only 65% of sexual minority students.

Next, using data drawn from more than 30,000 students who were seen at a counseling center on campus, McAleavey, Castonguay, and Locke (2011) sought to understand whether sexual minority students were at higher risk for mental health struggles than the general student population. Overall, they noted that nonheterosexual students were significantly more likely to seek mental health services (6.8% of sexual minority students vs. 4.3% of heterosexual students). They observed that “almost 1 out of every 5 students in college counseling identifies as a sexual minority” (p. 132). Focusing only on sexual minority students, it was reported that those identifying as “queer” were more than 3 times as likely as heterosexual students to seek counseling. Also of note, these authors emphasized the fact that within the group of sexual minority students, many significant differences were also present, suggesting that a “one size fits all” approach to LGBTQ mental health is insufficient. As an example, lesbians obtained significantly lower scores on an eating concerns measure than heterosexual women, gay men, and questioning students.

Finally, Effrig, Bieschke, and Locke (2011) examined data from students at more than 60 counseling centers across the United States and also from the general campus population. This study focused on students identifying as transgender, with the aim of comparing treatment-seeking and non-treatment-seeking transgender students. First, they found that distress was high across both groups, with no significant difference between the treatment seekers and non-treatment seekers. The investigators defined “distress” as rates of self-injury and attempted suicide. In the treatment-seeking group, more than twice as many students who identified as transgender reported engaging in self-injury compared to nontransgender students. And more than 3 times as many transgender students reported a suicide attempt compared to nontransgender students. Additionally, the transgender group was 1.5 times more likely to report being victimized (e.g., unwanted sexual contact, harassing or abusive behavior).

**Overview of Diversity Issues:** It is clear that attention to issues of diversity is critical. Data suggest that minority status can result in increased risk for mental health problems. At the same time, minority status may also create a barrier to accessing help. Additionally, unique intersections are apparent, such as sexual orientation and ethnic identity. Research based on minority stress theory (Meyer, 2003) offers an example: among ethnic minority students, being a sexual minority was connected with elevated psychological distress (Hayes, Chun-Kennedy, Edens, & Locke, 2011). Taken together, the research suggests that a multidimensional approach offers promise in terms of facilitating help seeking. In the final section of this paper, frameworks drawn from community psychology are used to create ideas for potential interventions that emphasize prevention, capitalize on students' strengths, and are based in the conceptualization of the campus as a community.

**AVENUES FOR INTERVENTION**
The status of college and university students' mental health is, indeed, a vitally important issue. To be sure, counseling centers are faced with innumerable challenges: increasing demand for services, increasing frequency and severity of psychological issues, and an increasingly diverse student body. The need for specialized training and support for mental health professionals is crucial in order to effectively address the needs of LGBTQ students.
problems, suicide, and campus violence (Hayes, 2011; Marsh, 2004). Much work has been done in terms of identifying and addressing risk factors, including those related to minority status. Building on this knowledge, let us reorient our view. Rather than approaching from a deficit model that emphasizes factors that diminish psychosocial functioning, let us articulate a goal of enhancing mental health through the conceptualization of the campus as a community. Indeed, while it is true that mental health disorders are associated with higher academic impairment, it is also true that improved mental health acts as a protective mechanism against things like suicidal behavior and academic struggles (Keyes et al., 2012).

In an interview, Mary Jane England (2004), a psychiatrist and former president of Regis College, likened the college campus to a community. She references numerous dimensions of diversity, including sex (e.g., the influence of violence on the lives of women) and ethnicity (e.g., more than 40% of freshmen are ethnic minorities). The conceptualization of the campus as a community is reflected in the following statement by England: “Our ability to work successfully with students with significant psychiatric illness reflects our total community’s attitude about building on an individual’s strengths. By total community I mean our maintenance staff, our housekeeping staff, our residential life staff, campus police, everyone on campus” (p. 10). A strong argument is being made that enhancing student mental health must be an agenda embraced by all members of the campus community.

Consequently, there are implications for multiple levels of intervention on campus and beyond, ranging from outreach programming and training of staff to establishing strong connections between providers on campus and local providers in the surrounding community. Approaching this issue from the perspective of community psychology offers some potential ways to create interventions that would augment existing service delivery. Values such as individual, relational, and collective well-being are a guiding force from this perspective (Nelson & Prilleltensky, 2010), along with the centrality of embracing heterogeneity between and within groups when seeking to support well-being. Furthermore, ecological models emphasize person/environment transaction and also reinforce fundamental aims including stigma reduction. The nested ecological model (Nelson & Prilleltensky), which describes the interdependence among the individual and the micro-, meso- and macrosystem, is a fitting example and is used as a means of organizing some of the suggested interventions that appear in the literature. What follows is not intended as an exhaustive list. Rather, the hope is that it serves as a springboard for future investigation and development through application of community psychology principles and values.

**Microlevel:** This level includes one’s immediate social network, such as family and friends. Within our conceptualization of the college campus as a community, the microlevel encompasses individuals and groups such as roommates, classmates, and friends. Focusing on this level in order to enhance individual coping and resiliency is of particular concern (Byrd & McKinney, 2012). One example is strengthening social support and connectedness, as we know that immediate social networks that do not validate treatment seeking can be a barrier for those in need (Eisenberg et al., 2012). Further, for some groups, such as African American students, it has been noted that higher ethnic identity (which can be reinforced through social connectedness) was associated with decreased self-stigma with regard to seeking mental health help (Cheng et al., 2013). Visibility of diversity on campus is a related issue of importance. In the study reported by Hayes, Youn, et al. (2011), it was apparent that having a diverse staff at a counseling center was associated with higher service utilization by diverse students. This suggests that providing mechanisms on campus for connection with members of one’s ingroup, which should include students, faculty, and staff, may be protective.

This relates to a second important theme that emerged in the literature, which is the need to combat the effects of self-stigma at the microlevel. Campuswide antistigma campaigns may be one mechanism for mitigating self-stigma at the level of the individual. This is because self-stigma is a natural consequence of living in a broader environment that marginalizes certain groups. Several authors described outreach programming as a way to accomplish this task. Outreach is vital, given the fact that a large number of students indicate that friends or fellow students are their main source of information about mental health services on campus (Yorgason et
al., 2008). Outreach could be done in person, such as in a residence hall, or electronically through web-based applications. Making information easily accessible, particularly for new staff and students on campus and for higher-risk groups, is especially important. This is because “not having time” was a commonly cited barrier to treatment (Yorgason et al.). Stigma-reduction campaigns can help change the climate of a student’s immediate microlevel environment, and there is evidence that such interventions are effective (Eisenberg et al., 2012). On a related note, it may be advisable to use phrases like “stress management” to describe services. This could help mitigate some of the stigma attached to seeking mental health help and reinforce positive coping skills.

**Mesolevel:** This level includes aspects of the environment that connect the individual to broader systems within the social context. In our conceptualization of the college student, this could involve faculty members and service providers on campus, such as counselors and health care providers. Additionally, campus climate, which includes attitudes toward help seeking and also toward minority groups, has an impact. Numerous authors echoed Kitzrow (2003): “Philosophically, institutions need to adopt the attitude that student mental health is an important and legitimate concern and responsibility of everyone involved in higher education (including administrators, faculty, and staff), rather than being the sole responsibility of the counseling center” (p. 175). This highlights the importance of adopting a global perspective, including the general campus climate, when addressing mental health issues.

Supporting this argument, Byrd and McKinney (2012) reported that negative experiences on campus specifically related to ethnic or sexual minority status were associated with worse mental health. Conversely, satisfaction with the climate at one’s institution was associated with better mental health. Hence, taking a look at the campus as a whole is important, as there is reason to believe that this connects to psychosocial functioning for minority students. An example of a campuswide effort is the Safe Zone program, which can be found at institutions across the nation. Here, staff and faculty self-identify as providing a safe and supportive space for LGBTQ students. Not only does this help change the campus environment through increased visibility and awareness, but it also provides a platform to confront stigma on a broad level.

Seeing the counseling center as a central part of campus functioning rather than as something peripheral was also mentioned as important in the literature (Schwartz, 2013). In this line of inquiry, the question of how resources are allocated to counseling centers was investigated by Hunt, Watkins, and Eisenberg (2012). These researchers interviewed key participants at multiple institutions in order to better understand the decision-making processes related to resource allocation. Of note is the fact that many participants highlighted the impact of recent crises on college campuses on funding decisions: “The thing that happens with mental health is that it gets people’s attention when bad things happen...so you kind of get people’s attention and they give you stuff and then it...goes by the wayside” (p. 852). As such, an institution’s commitment to ongoing investment in mental health is central. Additional suggestions included joining mental health with the institution’s academic mission, mental health activism on campus, and having leaders understand the importance of mental health.

Several authors discussed “gatekeeper training” as being important, emphasizing the need to integrate mental health services in existing activities on campus (Eisenberg et al., 2012; Silverman, 2004). Watson (2013) describes a program at Purdue University involving gatekeeper training for resident assistants in order to address suicide prevention. The idea of gatekeeper training was echoed in research conducted through a retrospective chart review at a local public psychiatric emergency hospital. Mitchell, Kader, et al. (2013) sought to better understand the types of mental health problems that are most likely to lead to the utilization of crisis services. One of the suggestions put forth by the authors is that “as many people on campus as possible need to be trained to become effective gatekeepers who are capable of recognizing the signs of distress, are knowledgeable about the resources available on campus and locally, and have the skills to help a student obtain the appropriate level of assistance” (p. 59). They also suggest that campuses attend to certain groups of students that seem to be at higher risk, including students of color.
Approaching from another angle, Mitchell, Darrow, et al. (2012) completed a study focusing on a curriculum infusion intervention, taking an "environmental approach" to mental health enhancement. Here, faculty members at a university were recruited to participate in infusing mental health into their curriculum. The program focused on suicide prevention and cultivated faculty partnerships in order to achieve the goal. Their report offers numerous creative unions between mental health providers and faculty on campus, including faculty in the departments of dance, visual studies, and business. The authors noted that following the intervention, "there was increased faculty engagement in mental health programs and promotion" (p. 23). In thinking about this approach, it may be beneficial to time such interventions with the rhythm of the academic calendar. That is, stress levels are likely to rise around the week of midterm exams, for example, so inviting faculty and students to participate in stress-reduction activities may be particularly salient during this time.

Finally, the New Diversity Initiative, described by Nolan, Ford, Kress, and Novak (2004), is an excellent example of an effort that has been made to change campus climate. Their work, accomplished at Baldwin Wallace University, sought to "successfully engage our whole campus community to become accepting and supporting of students with a variety of mental health needs" (p. 21). Steps in the process included: training the trainers (helping staff on campus understand mental health and mental illness), establishing a diversity research team, creating educational videos for faculty and staff, and establishing a referral system called "Because We Care" that allows students at risk to be identified. The authors observed that the wide-reaching initiative has had positive effects throughout campus.

**Macrolevel**: This level includes broad social structures such as policies and norms. As applied to a college community, this might involve university administration and beyond (e.g., state and federal laws that impact students' lives, community resources beyond campus). As an example, one study (Watkins, Hunt, & Eisenberg, 2012) focused on the perspective of college administrators. This investigation used semistructured interviews to collect administrators' perspectives on mental health issues on campus. In addition to concerns about symptom severity, administrators discussed their views on how the role of counseling centers on campus has changed. They noted that one potential mechanism for increasing service availability is increased funding for training programs. This would allow graduate students in training to gain experience at a counseling center, which would also help decrease the demand on full-time staff. Suggestions also included expanding outreach efforts and targeting students with specific types of conditions.

Extending outward even more, connecting beyond campus is important. Part of a counseling center's function, due to limited resources, is to screen and then link students with available services in the community (Eisenberg et al., 2012). Hence, facilitating collaboration with providers beyond campus is critical (Mitchell, Kader, et al., 2013). Colleges and universities might consider hosting events that invite providers from the community into campus life. An example of this can be found at Alverno College, which has hosted a series of mental health summits on campus and invited community treatment providers to participate. For instance, the college has held an African American Mental Health Practitioner Summit and a Latino/Latina Mental Health Practitioner Summit. These events firmly situate the campus within the broader context of the surrounding community.

Other initiatives have sought to improve ongoing monitoring and data collection, highlighting the importance of a continuing transaction between research and practice. The Center for Collegiate Mental Health, at the Pennsylvania State University, was established in 2004 in order to systematically collect information from institutions across the country. Recent indices show that nearly 200 counseling centers have actively participated in this effort. Data are collected across a wide range of psychological issues, and this type of systematic and consistent inquiry is invaluable in terms of using research to improve practice (Hayes, Locke, & Castonguay, 2011). The information has been instrumental in increasing understanding of issues such as the connection between minority status and distress. Further, it has strengthened the validity of current and applicable knowledge, because prior conclusions tended to be drawn through anecdotal evidence or were based on data from a single
institution (Locke, Bieschke, Castonguay, & Hayes, 2012).

**Multilevel:** There are some excellent examples of multilevel intervention strategies, and many of them are in the area of suicide prevention. Drum and Denmark (2012) provide information on an extensive model for suicide prevention that spans levels from the individual to the environmental. They point out that traditional approaches, which generally include specific referral to mental health providers, may not be adequate. Their model integrates prevention, intervention, and recovery across multiple levels (individual to environment). For instance, an environmental intervention targeting suicide prevention would be stigma reduction. An individually targeted strategy would be crisis counseling. Their model encompasses all aspects of students' experience, and encourages early intervention.

Next, the Jed Foundation (www.jedfoundation.org) has emerged as a major force in preventing suicide and promoting mental health in college students. This organization provides a wide range of resources that connect parents, students, and on-campus personnel. They offer a research-informed, comprehensive model that integrates aspects such as teaching life skills, increasing help-seeking behaviors, identifying higher-risk students, and promoting social connectedness on campus. Another example along these lines is the Active Minds organization (www.activeminds.org), which seeks to change campus climate with regard to mental health stigma in order to increase help seeking and decrease the number of suicides. This organization has chapters across the United States and Canada, and directs the Send Silence Packing® traveling display of backpacks. The number of backpacks in the display represents the number of suicide deaths each year on college campuses. Finally, the Suicide Prevention Resource Center (www.sprc.org) offers targeted information for campus providers, and also focuses on specific higher-risk populations such as American Indian/Alaskan Natives. This organization has created a “best practices registry” to connect providers.

**CONCLUSION**

This paper has sought to use an ecological approach, drawn from community psychology, as a means of enhancing the mental health of college and university students. The data are strong in terms of supporting the assertion that there is high need. Additionally, it is clear that there are factors that get in the way of students accessing help when they perceive a need for treatment. Attending to these needs in a way that is culturally competent, maintains awareness of diversity, and conceptualizes from an environmentally based approach is wholly appropriate given the existing evidence. It is hoped that this literature review provides a basis for future work that will improve current practice and effectively create new, empirically informed interventions that prioritize the psychosocial functioning and well-being of college students.
REFERENCES


