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# Depression and Suicidal Ideation in Undergraduate College Students: Risk Factors and Barriers to Treatment Present Within Universities

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Depression and Suicidal Ideation in Undergraduate College Students:  
Risk Factors & Barriers to Treatment Present Within Universities

by

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An undergraduate honors thesis submitted in partial fulfillment of the  
requirements for the degree of

Bachelor of Science

in

University Honors

and

Psychology

Thesis Adviser

Tina Burdsall, PhD.

Portland State University

2015

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### **Abstract**

Undergraduate college students are a unique at risk population for development of suicidal ideation and depression. Reviews of 36 different university counseling centers indicated an overall increase in risk factors associated with depression and suicidal ideation among college students, including anxiety, eating disorders, fear, substance abuse, alcohol abuse, hostility, and anger (Potter, Silverman, Connorton, & Posner, 2004). Currently, resources provided by university systems to address the increasing prevalence of suicidal ideation and depression symptoms among undergraduate college student population are limited (Potter et al., 2004). The Centers for Disease Control (CDC, 2009) projections predict depression to be the second most prevalent disease burden in the world within the next six years. In order to combat the increasing prevalence of depression and suicidal ideation among undergraduate college students (Pedersen, & Paves, 2014), I suggest universities address the barriers to treatment students face, including negative social stigmas (Ohayon, & Roberts, 2014), availability of mental health care and health care professionals (Potter et al., 2004), as well as implementation of screening measures (Potter et al., 2004). Some may argue that increasing efforts and resources for screening and treatment of depression and suicidal ideation may cost universities' money, but by providing preventative care through decreasing stigma, increasing screening efforts, and increasing availability of mental health care to the undergraduate student population I believe the quality of life for the student body will increase, and likeliness of depression and suicide will decrease. I trust most will agree that saving lives and improving psychological well being in undergraduate college students is invaluable.

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## Introduction

Despite suicide after depression being the leading cause of death among young adults (Capron, Lamis & Schmidt, 2014), sufficient diagnosis and treatment methods for depression in undergraduate college students is lacking (Weissman, 2007). The correlation between internal conflicts felt by young adults and increased rates of depression suggests more should be done to screen and treat for depression in undergraduate students (Feixas, Compan, Salla, Pucurull, & Guardia, 2014). Ohayon and Roberts (2014) suggest that further examination of the relationships between negative stigmas', seeking of mental health treatment, and avoidance of seeking treatment in college students is needed. Despite efforts to increase mental health care resources for students within universities, rates of depression and suicidal ideation have continued to increase (Pedersen & Paves, 2014). This paper examines research on depression and suicidal ideation among college students, as well as the barriers undergraduate students face in seeking treatment within universities. I suggest that approaching treatment as preventative care, through screening for suicidal ideation and depression, needs to be studied for a possible avenue to decrease the prevalence of depression and suicidal ideation among the undergraduate college student population.

Social pressures felt by college students and graduates continue to increase, as well as the prevalence of mental illness in college students (Pedersen et al., 2014). Many would argue the pressures of higher education elicit high anxiety rates, feelings of failure, stress, suicidal ideation, and depression among college students. Effective treatment and screening options for depression and suicidal ideation in this growing population demands more attention.

Graduates that competently integrate into the workforce maintain satisfying and longer lasting relationships, are more productive, and have better mental and physical health (Pereira-Lima & Loureiro, 2015). Major life transitions- like the ones graduates experience exiting school, or undergraduates experience entering college- can actually be detrimental to mental health, making it more likely to develop or exacerbate mental illnesses (Potter et al., 2004). Leaving ones formed social and support groups when entering a new environment with different, often more extreme social and academic pressures, can increase anxiety and depression in students (Potter et al., 2004). Emory University (2015) suggests that there are specific risk factors for university students related to suicide, including academic pressures, use of drugs and alcohol, decreased social and familial network/support, experience of new environments, and feelings of isolation and alienation.

Although mental health treatments have increased within the US, sufficient evidence that treatments have been effective in decreasing the prevalence of depression and other psychological distress is absent (Mojtabai & Jorm, 2015). Mojtabai et al. (2015) explains this confounding relationship between an increase in mental health treatment and no observable positive effects as an unfortunate miss matching of actual treatment care and individual need for treatment. College students appear to have an increased need for mental health care due to increased risk for mental health issues (Pompeo, 2014). Where screening has been implemented into students' student health care centers, increased identification and treatment of depression and suicidal ideation has been achieved (Klein, Ciotoli, and Chung, 2011).

Depression plagues an increasing percentage of the population each year, with research projections predicting depression to be the second most prevalent disease burden in the world in the next six years (Ohayon et al., 2014). Research by the Center for Disease Control and

Prevention (CDC) ranked suicide as the 10<sup>th</sup> leading cause of death in individuals older than 10 years, with nearly 37,000 deaths annually (2009). The same CDC study ranks suicide ahead of liver disease, homicide, HIV, Viral Hepatitis, and Parkinson's Disease (CDC, 2015) as a leading cause of death in the United States. Despite suicide following depression being the leading cause of death among young adults (Capron, Lamis & Schmidt, 2014), sufficient diagnosis and treatment methods for depression in undergraduate college students can still be strengthened.

I argue that there is a lack of sufficient understanding of depression and suicidal ideation in the undergraduate college student population, and university systems need to strengthen their screening and treatment efforts for depression and suicidal ideation. To address this, research into risk factors, adequate diagnosis, social stigmas, and treatment options must be explored more in depth within university systems. The goal should not only be to have college campuses free of student death by suicide, but also to build a student community who are mentally healthy and able to reach their full potential. This paper positions previous work done on depression and suicidal ideation in order to inspire open dialogue on how university systems can better screen and treat undergraduate college, with hopes that availability of mental health care for undergraduate college students in universities will increase and become more efficient, possibly through implementation of preventative screening and treatment measures.

### **Literature**

College is a time many young adults feel a pressure to develop identities, develop life goals, and make meaningful relationships. Internal conflicts can develop when these complex social lives, academic roles, and extracurricular activities conflict with an individual's beliefs or schedule (Ohayon et al., 2014). Internal conflicts have been correlated to higher rates of



depression, and an increase in level of anxiety (Feixas et al., 2014). Negative impacts on academic performance and graduation rates are expected from the onset of mental health issues, and can further increase risk factors for similar mental illnesses: for example, depression can commonly be exacerbated by situation and lead to an increase risk for developing suicidal ideation (Potter et al., 2004). Anxiety can increase further in individuals as the influence of perceived social status contributes to individuals' assessment of themselves (Pedersen et al., 2014). One example of a social status factor that can elicit anxiety is holding beliefs that others will think less of those who seek treatment for mental disorders (Pedersen et al., 2014). Conflicts between desiring mental health care, the fear of being stigmatized, and negative outcomes of individuals in need of care not being provided with care should be a major concern of university and college campuses.

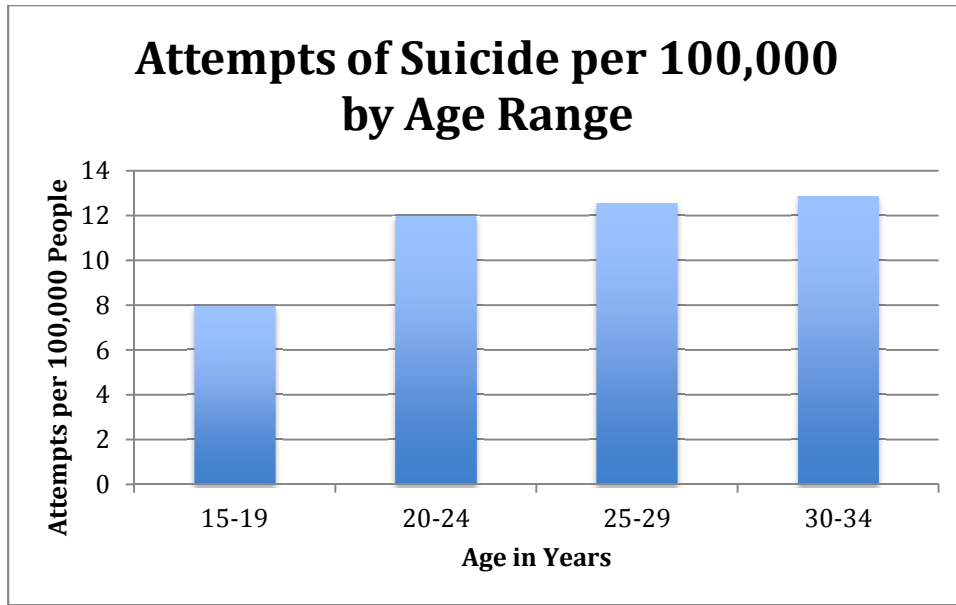
Potter et al. (2004) estimate between 5-25% of the university student population seeks mental health care services from their campus health centers. Four-year universities tend to support mental health care services to students through grants, and student fees (Potter et al., 2004). The mental health care facilities on university campus are usually limited in their resources though, and only provide short-term care with a set number of allotted annual visits for each student, which may not meet the mental health care needs of the student: mental health issues may intensify without proper or sufficient care (Potter et al., 2004).

Research suggests that there has been a shift in the onset of depression to a younger age, with onset occurring between the ages of 15 and 19 years old (Burke, Burke, Rae, & Regier, 1991). As stated by Hou, & Ng (2014), those who experience symptoms of mental illness are at greater risk of maladaptation later on in life, and are at greater risk for repeated and prolonged experience of symptoms (CDC, 2009). Experience of one depressive episode can increase an

individual's risk of symptoms relapsing by 50% (CDC, 2009). It is not completely clear if the onset of depression symptoms occurring at younger ages is increasing the prevalence of depression and related factors in university students, but the prevalence of mental illness in college students is continually increasing despite efforts to implement mental health care in universities (Ohayon et al., 2014). Figure 2 illustrates the slight and continual increase in suicide attempts by age group in young adults.

Research done by Ohayon et al. (2014) supports that the rates of depression in young adults are increasing. Reviews of 36 different universities counseling centers indicate an overall increase in anxiety, eating disorders, fear, alcohol abuse, substance abuse, anger, and hostility among college students (Potter et al., 2004). There are strong correlational relationships between the increased risk factors college students experience and the increased rates of suicidal ideation and depression: these relationships are most likely due to stressful life events, but can also be influenced or caused by an individual being predisposed to development of depression (Kendler, Karkowski, & Prescott, 1999).

Increasing rates of depression indicate that more specific treatment methods, accurate measures of treatment, and screening for depression are needed (Ohayon et al., 2014; Hou et al., 2014; Feixas et al., 2014). Depression is not only a burden to the individuals suffering from it, but also effects interpersonal relationships, and can create much larger issues within communities (CDC, 2013). Currently, within the United States it is estimated that every 38 seconds someone attempts suicide, and over 1,000 of these attempts result in completed suicides on college campuses every year (Emory University, 2015).



**Figure 1.** Attempts of suicide per each 100,000 people within four age categories for young adults (Potter et al., 2004).

Depression related risk factors, such as anxiety and suicidal ideation, are a few areas in which such screening and treatments can be focused (Capron et al., 2014). There is need for universities' to study and implement approaches to diagnosis and treatment of depression and suicidal ideation in undergraduate students. I believe that active periodic screening of college students' anxiety levels and peer relationships may be a promising treatment approach to decrease levels of depression, and suicidal ideation.

### **Diagnosis**

Depression can present as sad or depressed mood, change in weight, loss of interest of previously pleasurable activities, change in psychomotor abilities/movement, feelings of guilt, fatigue, suicidal ideation, thoughts of death, and difficulties concentration (CDC, 2013).

Depression can cause emotional, psychological, and psychological symptoms, such as depressed appetite, weight loss, lack of energy, mental distress, sleep disturbance, as well as physical and emotional pain and discomfort (Depressive Disorders, 2013). Klein et al. (2011), in a recent

nationally representative study, found more than 10% of college students have experience depression or anxiety that negatively affected their functioning.

Although many individuals experience depressed emotions from time to time, there are different levels of depression. The Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) is one major tool used by mental health care professionals to diagnose and help treat mental disorders. Within the DSM-5 there is strict diagnostic criteria for identification of depressive disorders: “Depressive disorders include disruptive mood dysregulation disorder, major depressive disorder (including major depressive episode), persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, other specified depressive disorder, and unspecified depressive disorder” (Depressive Disorders, 2013).

An official diagnosis of Major Depressive Disorder must include at least five or more specific symptoms, different from normal functioning for that individual, coupled with a “loss of interest or pleasure” or a “depressed mood,” and must be “present during the same 2-week period” (Depressive Disorders, 2013). The DSM-5 (Depressive Disorders, 2013) lists in detail the possible symptoms of Major Depressive Disorder, as shown in Table 1. Furthermore, the DSM-5 defines all depressive disorders in defining detail, providing information on risk factors, prevalence, other possible diagnoses, as well as other important factors to consider when assessing a patient's diagnosis (Depressive Disorders, 2013).

Often depression and suicidal ideation are associated with risk factors. Recognition of risk factors and what populations are at risk or exposed to risk factors can assist in screening and

treatment of suicidal ideation and depression (Depressive Disorders, 2013; Kilmartin, 2010).

Depression is a major risk factor for suicidal ideation (Emory University, 2015). Anxiety is a common risk factor prevalent in individuals who experience depression (Pereira-Lima et al., 2015; Emory University, 2015). Anxiety can be thought of as fear or anticipation felt in relation to an event(s) or circumstances, either imagined or real, that have, will, or might occur (Depressive Disorders, 2013).

**Table 1.** The symptoms and definitions of Major Depressive Disorder, as provided by the DSM-5 (Depressive Disorders, 2013). Symptoms must follow at least five of the numbered category, and occur nearly every day.

Symptom Category	Definition of Category
1.	Depressed mood most of the day
2.	Diminished pleasure and/or interest in almost everything most of the day
3.	Decrease or increase nearly everyday in appetite, or a significant loss of weight or weight gain when not trying to change weight.
4.	Hypersomnia or insomnia
5.	Psychomotor retardation or agitation
6.	Loss of energy or fatigue
7.	Feelings of inappropriate guilt, feeling worthless
8.	Indecisiveness or a decreased ability to concentrate
9.	Continuing thoughts of death, suicidal attempts, or suicidal ideation
A & B	These symptoms must cause distress or impairment determined to be significant by a clinician, and the symptoms cannot be attributed to use of a substance or another medical condition.

Suicide is one of the major concerning possible outcomes of depression, and it is important to consider how suicide manifests in undergraduate students. Potter et al. (2004)

discuss a model of suicide as being part of a continuum, as illustrated in Figure 2. Suicidal ideation is the first stage on a continuum to completion of suicide: first suicidal ideation occurs with thoughts about suicide, then planning and preparation for suicide, followed by threatening to take one's life, followed by real attempts at suicide, and finally completion of suicide. Many depressed individuals experience suicidal ideation, which is thinking in depth about death, how to commit suicide, outcomes of suicide, and all other options related to committing suicide or death. Out of every ten college students, one has experienced suicidal thoughts or attempted suicide while in college (Emory University, 2015). Although it is possible that there are some suicides that are not premeditated, suicidal ideation can be a very important associated factor in depressed individuals, and one of the most urgent to address for individuals safety.



**Figure 2.** The suicide continuum, showing escalation of suicidal ideation to the complete act of suicide (Potter et al., 2004).

By better understanding how aspects of depression are defined, it becomes easier to recognize sign of depression. University students experience factors everyday that can attribute to depression and suicidal ideation, such as test taking, environmental changes, poor diet, and accruing student debt (Potter et al., 2004). Such stresses can cause rises in anxiety, which is one known risk factors for depression (Pereira-Lima et al., 2015). The mere absence of expected symptoms does not necessarily mean that an individual is happy, which is why by better

understanding the risk factors for suicidal ideation and depression, universities may more easily identify at risk students (Nierenberg, Bentley, Farabaugh, Fava, & Deckersbach, 2012).

### **Risk Factors for Depression and Suicidal Ideation**

Factors that attribute to the development, severity, and duration of depression and depressive symptoms provide useful tools to combat the prevalence of depression by offering a starting point for treatments and screening methods (Potter et al, 2004). Depression can occur in waves, and will frequently return in individuals who have “gotten over” their depressive symptoms (Depressive Disorders, 2013). Even the experience of one depressive episode increases an individual’s risk of symptoms relapsing by 50% (CDC, 2009); for individuals suffering from depression, this could mean more frequent relapses, and possibly increased severity, overtime. Glasheen, Pemberton, Lipari, Copello, & Mattson (2015) state that major depression is “one of the strongest known risk factors for suicide,” and about 8.5 million adults’ contemplated suicide in the past year, with half of this population experiencing a Major Depressive Episode (Glasheen et al., 2015).

The inability to effectively persevere and adapt to social and environmental changes and pressures is a contributing factor to depression (Abdollahi, Talib, Yaacob, & Ismail, 2015). No matter what age a student enters into university academia, it is a very unique environment, requiring perseverance and adaptive skills (Abdollahi et al., 2015). High stress, even if stress is merely perceived, is an exogenous, or environmental, variable in depression (Abdollahi et al., 2015). Just the mere changing of environment, such as moving cities or getting a new class schedule, can cause stress (Potter et al., 2004). Major life events are strongly correlated to the onset of major depressive episodes (Kendler et al., 1999). New university students often

experience multiple major life events affecting their abilities to cope and adapt effectively: colleges often include new environments, students experience a loss of social and emotional support networks, academic pressures are more demanding, and feelings of failure can accompany the transition of students to a university setting (Emory University, 2015).

Social skills are negatively associated with burnout, resulting in exhaustion emotionally, dehumanization, and detachment (Pereira-Lima et al., 2015). High rates of mental health issues and high burnout rates were shown to be prevalent in medical school students (Pereira-Lima et al., 2015), suggesting the more challenging the program of study, the larger workloads and pressure on the student result in higher rates of poor mental health issues, and higher probability of burnout. Positive relationships and social support are positive factors that reduce risk of depression (Pereira-Lima et al., 2015). Contrarily, nicotine and alcohol use, fatigue, sleep deprivation, and some demographic characteristics – such as income or family expectations - are all risk factors for student performance (Pereira-Lima et al., 2015). Students who strive for perfection in academia or over commit to school related functions and activities may be at a greater risk for depression (Cheng, Dolsen, Girz, Rudowski, Chang, & Deldin, 2015).

Abdollahi et al. (2015) discuss suicidal ideation as an endogenous variable, meaning there are external factors that contribute to the development of suicidal ideation. The abuse of drugs and alcohol, as well as negative social stigmas, are all external factors that are known risk factors for development of depression and suicidal ideation (Glasheen et al., 2015; Abdollahi et al., 2015; Emory University, 2015). Binge drinking is linked to suicidal ideation, and suicide attempts (Glasheen et al., 2015). Glasheen et al. (2015) believe acute intoxication, such as binge drinking, to be a greater suicide risk factor than repetitive alcohol use. Consumption of alcohol starting at a younger age is also associated with the development of depression (CDC, 2009).



Binge drinking is a possible identifiable area for universities to implement suicide prevention and awareness programs (Glasheen et al., 2015).

Diet and lifestyle are also correlated to development of depression. Dipnall, Pasco, Meyer, Berk, Williams, Dodd, & Jacka (2015) found that poor dietary patterns increased the likelihood of depressive symptoms. Obesity and low physical activity are risk factors for depression, but increasing physical activity can, overtime, decrease depression symptoms (CDC, 2009). Interrupted sleep or poor sleeping patterns also increase the likelihood of developing depression (CDC, 2009).

Smoking is yet another risk factor that is strongly associated with depression, with recurrent signs of depression shown more readily in smokers than in individuals that do not smoke (CDC, 2009). For frequent smokers, nicotine can improve symptoms of depression temporarily, but the cessation of smoking is negatively associated with depressive symptoms (CDC, 2009). Nicotine is both highly toxic, and highly addictive, and for those who start smoking at a younger age the temporary increase in cognitive ability can lead to repetitive self administration and addiction (Meyer, & Quenzer, 2013). Depression and life satisfaction are correlated to college student cigarette smoking, as well as having low self worth and the use of alcohol and other substances (Patterson, Lerman, Kaufmann, Neuner, & Audrain-McGovern, 2004).

### **Screening Methods**

Students considering suicide display multiple risk factors and risk behaviors, such as increased use of illegal drugs, tobacco use, and increased use of alcohol and binge drinking (Potter et al., 2004). Colleges may unintentionally contribute to students' suicide rates and

depression in their inadvertent exacerbation of risk factors, such as stress disorders (Potter et al., 2004). Risk factors for suicidal ideation, even in the absence of depression, could offer more routes of intervention and prevention of suicide in college students (Glasheen et al., 2015).

Knowing what risk factors are associated with depression and suicidal ideation may be the first step, but it is also important to consider age, demographics, economical status, and social status as confounded by the university atmosphere before selecting treatment methods for college students (Eisenberg et al., 2007). In a composite of data from 2005-2009, the CDC (2009) recognized that high rates of suicide are most prevalent in American Indians and Alaskan Natives (17.48 suicides per 100,000 people) and Non-Hispanic Whites (15.99 suicides per 100,000 people). Native Americans and African Americans each make up six percent of suicides in the United States, but African American females are least likely to commit suicide across all groups (Emory University, 2015). Emory University (2015) states that whites commit 84 percent of suicides. Males make up 80 percent of suicides and are four times more likely to die from suicide than females, yet females attempt suicide four times more often than males do (Emory University, 2015). Male suicide rates may be higher than females because males' tend to use more lethal methods, such as guns, while females tend to use less lethal methods, such as cutting and medication, when attempting suicide (Kilmartin, 2010). Klein et al. (2011) note that there is significant difference in both the number of male students who seek treatment, as well as how males present depression. Males tend to respond differently to self-screening questionnaires, which maybe a gendered response due to social stigma from the community and fear of violating male stereotypes (Klein et al., 2011). Further analysis and study of how depression and suicide attempts present in different demographic groups is needed to create more accurate screening methods for the broader undergraduate population (Klein et al., 2011; Potter et al., 2004).

Screening for mental illness in a large population is difficult since factors contributing to specific disorders and illnesses, such as suicidal ideation, can differ person to person (Potter et al., 2004), but providing screening during check-in at student health centers has been shown an effective screening method for university campuses' (Klein et al., 2011). Despite challenges for screening, depression is a common risk factor for suicidal ideation, and depression and substance abuse screening can be administered with a fairly high accuracy rate (Potter et al., 2004).

Potter et al. (2004) suggest administration of screening on university campuses as part of student orientation. Rescreening should be administered at student health centers during each visit for primary care, as well as for mental health care (Potter et al., 2004). Universities and college systems should also realize that mental health screening for depression and suicidal ideation requires the correct post-screening treatment or referral programs for students who are at risk for depression and suicidal ideation (Potter et al., 2004). Any screening methods implemented within college and university systems must be prepared to treat for the criteria screened for, whereas in reality few mental health centers within university systems have the correct programs or faculty available to respond accurately to mental illness (Potter et al., 2004). An effective screening method may consist of screening students during check-in for depression while at their student health center for non-mental health services (Klein et al., 2011).

There are multiple screening methods that can be used by universities to assess the likelihood that students may be depressed, experiencing depression symptoms, or experiencing suicidal ideation. A few of the relevant and useful screening methods available include the Perceive Stress Scale, the Attitude Toward Self-Revised Scale, the Beck Hopelessness Scale, the Burnout Syndrome Inventory, Social Skills Inventory, the Subjective Happiness Scale, and the Beck Depression Inventory II.

One prominent screening method for depression is the Beck Depression Inventory II (BDI-II) (Beck, Steer, and Brown, 1991). The BDI-II is a 21 question self-rating screening method, including rating options between 0 (not present) to 3 (severe) (Beck et al., 1991-1996). The rating scale has been increased from a previous version which asked for rating of symptoms over the last week, with the BDI-II including symptoms from the previous two week time period (Beck et al., 1996). Beck et al. (1996) determined the BDI-II to be used for ages 13 and up, and can be administered in group, or individual settings. Because of the set-up of the BDI-II it is easy to administer, and time effective, only taking 5-10 minutes to complete (Beck et al., 1996). The BDI-II is currently available in English and Spanish versions (Beck et al., 1996).

In a retrospective study by Klein et al. (2011), a two-tiered screening and diagnostic tool was used to identify depression: first administration of the Patient Health Questionnaire-2 (PHQ-2) was used in identification of possible depression symptoms during a visit to the campus health center (primary care), then administration of the Patient Health Questionnaire-9 (PHQ-9) was used to further identify depression symptoms in college students who scored high for being at risk, or exhibiting depression symptoms from the previous PHQ-2 screening. Klein et al. (2011) found that this two-tiered method of screening to be effective in diagnosis of depression in college students, with a low refusal of treatment for symptoms as well.

Screening methods for suicide include the Beck Scale for Suicidal Ideation and the Suicide History Self-Rating Screening Scale. The Beck Scale for Suicidal Ideation is similar in setup to the BDI-II, with a 19-item scale used to identify and interpret suicidal ideation and intent to commit suicide (suicidal desire), with assessment on suicidal thoughts (passive desire), and suicidal intention (specific planning of suicide) (Beck, Aaron, Kovacs, and Weissman, 1979).

The Suicide History Self-Rating Screening Scale (SHSS) is an 18-question method of screening that monitors suicidal intent, intent to harm, suicidal ideation, and suicidal behaviors (Innamorati, Pompili, Serafini, Lester, Erbuto, Amore, Girardi, 2011). Innamorati et al. (2011) created questions monitoring these behaviors, thoughts, and intentions of suicide over a 12-month previous time frame, which is a much longer time frame area than that assessed for in the BDI-II.

### **Treatment Methods**

Effective screening for depression is only part of the equation when it comes to addressing depression in college students; desire to seek out treatment or openness to suggested treatment for symptoms from a primary care physician can help students confront symptoms of depression and suicidal ideation. Kline et al. (2011) found that college students were largely open to treatment for depression if suggested by the university health provider after screening for depression symptoms. The first step towards treatment of depression and suicidal ideation may be as simple as the two-tiered questionnaire system (Kline et al., 2011), first identifying the presence of symptoms during a visit to the student health center, and then assessing symptoms with a secondary questionnaire.

Identification of suicidal thoughts and depressive moods are not enough; universities must implement treatment plans for students who would otherwise go untreated, and who may experience an increase in depression symptoms. Once depression or suicidal ideation has been identified, or an individual has sought out treatment, professional help must be provided (Potter et al., 2004). Treatments can be offered for individuals for groups, and could be provided on campus, or by referral to community health centers or providers (Klein et al., 2011).

## **Barriers**

One of the most important areas to consider in treating depression and suicidal ideation is the barriers college students encounter when seeking treatment. Pedersen et al. (2014) address the issue of barriers specific to treatment seeking for depression symptoms in young adults, stating that negative social stigma towards treatment seeking and mental disorders, self identification as a person with mental illness, lack of knowledge about resources, cost concerns, demographics, and care availability are all challenges to seeking treatment. In work done by Pedersen et al. (2014) there are two types of barriers to examine between symptoms of depression and seeking treatment: logistical and attitudinal.

### **Logistical Barriers**

Barriers between undergraduate university students and mental health care can vary from school to school, depending on demographics, state, healthcare laws, and tuition cost (Eisenberg et al., 2007). Some logistic barriers that may occur in treatment seeking for depression or suicidal ideation include healthcare costs, resources available, lack of mental health screening, and lack of care options available (Klein et al., 2011). Increasing knowledge about mental illness available to on campus counseling centers and students, and by strategizing ways to address mental illness in undergraduate students, overall stigma associated with treatment seeking may reduce in prevalence (Pompeo, 2014).

### **Attitudinal Barriers**

Social stigmas and internal conflict within university students experiencing depression or suicidal ideation are two very serious attitudinal barriers between symptoms of suicidal ideation and depression symptoms and treatment seeking (Pederson et al., 2014; Feixas et al., 2014).

Public stigma is one of the most influential barriers between mental health issues and treatment (Pederson et al., 2014). Pederson et al. (2014) define public stigma as the negative attitudes against people of a particular group, and in this instance, against those who seek treatment for mental health concerns, such as depression. Eisenberg et al. (2007) state that of college student with mental health needs being unmet, one-fifth of them state that worrying about what others will think of them is a major barrier to treatment seeking. Similarly, Mojtabai et al. (2011) report that about one-fifth of people receiving mental health care drop out of care because of perceived stigma from the public. Despite dropout rates, Klein et al. (2011) found that initial participation in treatment and openness to treatment for depressive symptoms is high in the college population, as long as the treatment is easily accessible.

### **Discussion**

College-aged students show a greater prevalence of severe depression and mental illness than other age populations (Pompeo, 2014). Suicidal ideation and depression are linked in many ways, and have similar confounding variables, such as anxiety and stress (Hou et al., 2014). Such variables can be exacerbated by an individual's socioeconomic status, living situation, level of education, and home life (Pedersen et al., 2014). Because of combined risk factors, college students often at an increasing risk of development for depression and suicidal ideation, making this population very important for treatment and intervention methods (Ohayon et al., 2014).

There are many different ways in which depression can present itself in individuals, and some of these differ by population (Pedersen et al., 2014; Potter et al., 2004). For the undergraduate college population, some of the most common risk factors for depression include high anxiety levels, lack of sleep, lack of exercise, insufficient diet, social stigmas, and feelings

of inadequacy, whether it inadequacy about social or academic performance, or possibly feeling inadequately prepared for the future job market (Pompili et al., 2015; Lilienfeld et al., 2009).

Suicidal ideation in the undergraduate college population shares many of the same risk factors as depression, with depression being a major risk factor for suicidal thoughts and feelings (Beck, Kovacs, & Weissman, 1979).

Feelings of hopelessness, thoughts of killing oneself, and being physically impaired by the physical aspects of depression and suicidal ideation are devastating consequences to an individuals' ability to reach their potential and live a fulfilling life (Lilienfeld et al., 2009; Comer, 2014). Because undergraduate life is a breeding ground for risk factors associated with suicidal ideation and depression among students, more should be done to assess and address screening and treatment methods available for students suffering from mental health issues such as these.

There are several very obvious reasons university systems should be concerned with the mental health of their undergraduate populations. Firstly, undergraduate students who suffer from depression and suicidal ideation may find completing exceptional academic work, keeping good grades and graduating as not important, too stressful, or too difficult. Not only will students' academic performance suffer, but the university statistics for their undergraduate students may suffer; it's likely there would be a lower graduation rate for undergraduates, and less of the undergraduate population would continue on to graduate or doctoral academics. Put bluntly, poor mental health in the student population reflects poorly on the university (NAMI, 2015).



Unfortunately, there is a lack of research on how and if screening for depression early on in the undergraduate population, such as at freshman orientation, would effect the overall prevalence of depression and suicidal ideation in the college student population (Potter et al., 2004). Universities should focus more on the mental wellbeing of the undergraduate student, taking into account the potential positive impact this mental health care could provide to the student and the university system. Given the current research on depression and suicidal ideation among college students, it is probable that students who are treated for mental health concerns such as depression, or suicidal ideation, will be at a lower risk of suicide, mental burnout, present better academic work, and maintain higher attendance (NAMI, 2015). Providing mental health care free to students may increase likelihood of students seeking out mental health care facilities to address anxiety, which is a major risk factor for depression and suicidal ideation. Providing better psychiatric care, and assessment and intervention tools have potential to increase likelihood of mental healthcare seeking in students (Klein et al., 2011). In order to decrease negative stigma associated with help seeking and mental illness, increasing accessibility of health services on college campuses available to students, educating faculty and students on the seriousness of depression and suicidal ideation, as well as the treatments available, has promise. Such prevention strategies are suggest by Potter et al. (2004), and I believe them to be potentially beneficial criteria to providing better treatment for depression and suicidal ideation for undergraduate students: with the implementation of screening, crisis management systems, mental healthcare systems, social promotion and marketing, and increasing educational programs around prevention, recognition, referral, and treatment of suicidal ideation and depression. See Appendix A for an excerpt from Potter et al. (2004)'s work and suggested program outline for better mental health care for college students, which should be taken into consideration for

further implementation in universities. Although the model in Appendix A (Potter et al., 2004) provides a great model for universities to follow to decrease campus suicides, a heavier focus on pre-screening for depression and suicidal ideation should be considered, and may provide a route for decreasing prevalence of suicidal risk factors, such as feelings of anxiety, if treatment for less severe issues can be addressed; for example, treating anxiety disorders before they lead to development of depression or suicidal ideation.

Barriers in universities need to be addressed in order to decrease the prevalence of mental health issues in undergraduate students. Logistical and attitudinal barriers must be addressed in order to provide more adequate mental health care to undergraduate students in a time when many risk factors for the development of mental illness increase. Logistically, university systems must recognize the increase in prevalence of major mental health issues in undergraduate college age students, and be open to discussing the issues surrounding mental health. More support financially must be given to increase campaigns, provide screening, pay staff, and create more comprehensive service to undergraduate students seeking mental health care (Eisenberg et al., 2007; Pompeo, 2014; Pederson et al., 2014).

Attitudinal barriers that need to be addressed include negative stigmas about giving mental health treatment, and addressing negative stigmas within individuals in need of treatment (Pederson et al., 2014). Students hold double standards in their opinions on seeking mental health care: often students will support others who need to seek care for mental health concerns, but when they personally feel in need to seek treatment will avoid treatment because they believe others will think negatively about them (Pompeo, 2014). Addressing negative stigmas around depression and suicidal ideation may increase the likelihood of students seeking mental health treatments when needed.

In order to break down some of these attitudinal barriers, university systems must be more involved. Education on the resources available to students, education on risk factors and symptoms of depression and suicidal ideation, and screening for and treatment of suicidal ideation and depression need to be continually integrated into university staff training, as well in student orientation. Providing more open dialogues about the symptoms, risk factors, and signs of depression among undergraduate students could help break down some of the dangerous attitudinal barriers present in young adults.

Simply decreasing the negative stigma around depression and suicidal ideation could greatly reduce the prevalence and severity of mental illness in undergraduate students. Although mental illness such as Major Depressive Disorder may require much more treatment, and possibly medication (Weissman, 2007; Bakst et al., 2014; Lawlor et al., 2001), addressing the social stigma and availability of mental healthcare for university students and faculty is a great place to start in addressing the increase in mental illness among young adults (Pompeo, 2014).

Although there has been an increase in mental health care in many university systems, the reduction of barriers to treatment, and effective education on what depression and suicidal ideation are needs to be elaborated upon. This paper provides a platform for discussion about known risk factors associated with suicidal ideation and depressive symptoms in undergraduate college students, and hopefully will reduce negative social stigma against mental illness. Depression and suicidal ideation rates increase substantially in college students from younger populations (Potter et al., 2004; Ohayon et al., 2014), making this population particularly important to screen and treat.

Despite barriers and obstacles, it is possible that university systems with the right guidance and intentions could increase the wellbeing of their students by decreasing the prevalence of depression and suicidal ideation. Given the right tools and conversational platforms, future undergraduate students could see less stigma and barriers associated with the screening for, and treatment of suicidal ideation and depression. Preventative measures, such as screening students during orientation for depressive symptoms, are a promising area in need of more research to determine if preventative care may reduce overall prevalence of depression and suicidal ideation in undergraduate college students.

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Appendix A

Jed/EDC Partnership Model: Elements of a Comprehensive Suicide Prevention Program for Colleges and Universities

