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Depression's Influence on Involvement
A Thesis
Presented to
The School of Graduate Studies
Department of Higher Education and Student Development
Taylor University
Upland, Indiana
In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts in Higher Education and Student Development
Ву
David McKenzie Downey
May, 2010
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Higher Education and Student Development Taylor University Upland, Indiana

CERTIFICATE OF APPROVAL

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	This is to certify that the Thesis of
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	entitled
[Depression's Influence on Involvement
has been approved by	the Examining Committee for the thesis requirement for the Master of Arts degree
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Abstract

Depression is a major issue among college students. Research is clear that depression is an increasing problem in college; approximately half of all college students will experience at least one period of depression during their college experience (Kadison & Digeronimo, 2004, p. 240; Westfield & Furr, 2001). Further, higher education literature emphasizes the importance of student involvement in regards to key issues including academic performance, retention, and personal development (Astin, 1999; Cress et al., 2001; Abrahamowicz 1988). This research sought to identify how a student's level of depression influences the extent to which a student is actively involved in the college experience. In order to gain these results, 412 senior students who completed the College Senior Survey (CSS) were studied to compare their level of depression to their level of involvement in three major categories: 1) academic involvement; 2) faculty student interaction; 3) extra-curricular involvement. Consistent with current research, 55.3% of students experienced depression during their college experience. Interestingly, the relationship between depression and involvement was not significant for any of the three types of involvement, indicating depression had little influence on student involvement. However, the sex of the student significantly influenced the level of academic involvement (female students were significantly more involved). Also consistent with research, female students were more likely to experience depression.

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CHAPTER 1

INTRODUCTION

Depression

Entering college is an overwhelming transition for any young adult. This adjustment is saturated with stress, change, confusion, anxiety, pressure, and the unknown. The comfort of family, friends, and familiarity are left behind: already fragile mental health can be further shaken. Schlossberg's transition theory sheds light on this issue. She noted that the "transitions may lead to growth, but decline is also a possible outcome" (as cited in Evans, Forney & DiBrito, 1998, p. 112). Kadison (2004) points out in his revolutionary book *College of the Overwhelmed* that "despite this appearance of comfortable status, secure environment, and a pleasant social world, a multitude of hidden problems have caused a steady and alarming rise in the severity of students' mental health problems" (p. 5). As a result, the development of mental health issues (specifically depression) among young adults is widespread. Although depression in college has always been a significant subject, in recent years the problem has escalated.

In a 2004 study conducted by the National Alliance for the Mentally III (NAMI), 50% of college students rated their mental health as below average. Shockingly, 1 in 7 students admitted that their mental illness translated into difficulty functioning

(Professional Development Collection, 2004). Similarly, the University of Minnesota Boynton Health Service revealed mental health issues amid students were customary. In this 10,000 participant survey, 27.1% of students said they had been diagnosed with a mental illness during their lifetime; 15.7% affirmed this illness began within the last 12 months indicating that mental health is an increasing problem (H. M., 2008). In a 2002 American College Health Association survey, 44.7% of students said they "felt so depressed that it was difficult to function [at least once during their last school year]" (Kadison, 2004, p. 240).

The National Mental Health Association would agree that the commonness of mental illnesses among the college population has been increasing over the last several years. In 2003, the NMHA conducted a survey of all counseling center directors at colleges and universities and reported that "more than 80 percent of colleges say they are seeing more students with serious psychological problems than five years ago" (Miller, 2004, p. 1). Dr. Aruna Jha of the University of Illinois-Chicago comments that "everyone is reporting increased incidents of depressed students" (Miller, p. 1). Kansas State University (Patterson, 2003) discovered that the number of depression cases in their counseling center had doubled between 1988 and 2001, and "these findings reflect the increasing rates on most college campuses" (Kadison, 2004, p. 95). Unmistakably, depression is plaguing our college campuses. Recognizing how mental illness might influence student involvement is of vital importance and is the focal point of this research.

Involvement

A student's active participation in his or her college experience is absolutely vital for several key reasons including satisfaction, academic success, and persistence at an institution. Several theorists, including Astin (1999), are convinced that a students' involvement is the essential piece in their education. If colleges are not seeking ways to heighten active engagement from students, well intentioned efforts will fail. Within Astin's involvement theory (1999), involvement is defined as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 518). This energy includes activities such as studying, participation in student organizations and clubs, athletic and physical engagement, interaction with faculty members, and socializing with fellow students. Astin further postulates that "the amount of student learning and personal development associated with any education program is directly proportional to the quality and quantity of student involvement in that program" (p. 519).

Given the obvious importance of student involvement, educators must be aware of any conditions that have the tendency to diminish a student's active participation in educationally purposeful activities. Unfortunately, there are indications that involvement is highly influenced by the state of depression. Several studies consistently indicate certain personality traits that lend themselves to depression including a lack of assertiveness (Olinger, Shaw & Kuiper, 1987). Vrendenberg, O'Brien, and Krames (1988) found that groups of non-depressed students had significantly higher levels of assertiveness than their depressed counterparts. Because the choice to engage must be made by the students themselves, depressed students have a greater challenge getting involved on campus.

Feelings of loneliness, isolation, and alienation are the driving force behind many depression cases. Furr, Westefeld, McConnell, and Jenkins (2001) discovered that the second leading cause of depression among their sample was the feeling of loneliness. A program titled "Creating Community at UIC" sought to determine the root of depression and concluded "that the main reason behind depression was the feeling of alienation-especially when students felt disconnected from social groups or couldn't identify with their college" (Miller, 2004, p. 3). The fact that depression is closely linked to loneliness and isolation further illustrates the potential for a students' depression to hinder their involvement patterns.

If depression does hinder involvement, it would then significantly impact academic success. One analysis revealed that depressed students indicated receiving lower grades than the nondepressed subjects. These same depressed students also indicated less satisfaction in regards to their grades (Vrendenburg, O'Brien & Krames, 1988, p. 6). Findings by Heiligenstein and Guenther (1996) support the previous results; a vast majority of their depressed subjects demonstrated "academic impairment."

In addition to academics, depression also negatively shapes other critical issues including retention rates (Astin, 1975), a student's susceptibility to drop out of college (Tinto, 1975), and satisfaction with their college experience (Abrahamowicz, 1988). The probable connection between depression and involvement intensifies the importance of tackling these problems.

Purpose of Study

Although ample research exists regarding depression and college involvement, few studies have addressed the connection between the two. Research discussing depression and other issues of loneliness, hopelessness, and stress are everywhere, but the focus of these studies is to discover levels of mental illness. Research has shed light on a variety of related issues including how athletic and physical involvement can potentially aid in reversing depression (Taliaferro, Rienzo, Pigg, Miller, & Dodd, 2008; Sanders, Field, & Diego, 2000), specific personal characteristics that lend themselves to depression (Vrendenburg, O'Brien, & Krames, 1988), and the relationship between depression and academic impairment (Heligenstein, Guenther, & Greta, 1996).

Nevertheless, there is more to be discovered related to this disease.

Similarly, research delving into involvement of college students is prevalent. Astin's theory of involvement is entrenched in much of the literature. Research has connected involvement to satisfaction levels (Abrahamowicz, 1988), reasons for dropping out of college (Tinto, 1975; Astin, 1975), retention levels (Astin, 1975), academic achievement (Yin, Dean, & Simon, 2007), and various other developmental outcomes (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001). Because involvement is an important element of a student's educational experience, factors that might limit or diminish involvement are very important. There is reason to believe that depression may be such a factor. Given the prevalence of depression among college students, this possible connection warrants further investigation. Certain research may uncover glimpses of the interconnection between involvement and depression (Taliaferro, Rienzo, Pigg, Miller, & Dodd, 2009; Westefeld & Furr, 1987), but a study is needed that is

exclusively geared towards understanding how depression within college students affects their involvement. Although this study certainly will shed light on issues related to both involvement and depression individually, the overarching goal is to discover the relationship that may exist between depression and levels of involvement.

Benefits of the Study

Possible benefits of this research are numerous. First, any additional degree of insight into depression will help fight against this serious issue. Additionally, this research will add to the important body of college depression literature. Further, levels and types of involvement within a population of students will be explored. Because involvement is fundamental to the collegiate experience, this information will prove useful. Most importantly, this research will provide insight into the relationship between depression and involvement. If a negative relationship is found, the implication for higher education will be increasingly significant. If, as is known, low involvement decreases retention, satisfaction, academic achievement, and if depression lowers involvement, then depression would also decrease retention, satisfaction, and academic success. More broadly, if the level of student involvement is directly related to the level of student learning and development, and depression lowers involvement, then depression would also decrease student learning and positive development. Consequently, if an institution desires to amplify active involvement, attending to the mental health needs of students is a high priority.

Finally, as mentioned in the purpose of the study, this research could emphasize the importance of providing quality counseling services at all institutions of higher

learning and the necessity that students take advantage of these services. Many administrators feel their colleges should not become "residential treatment centers for students with unstable mental health problems" (Kadison, 2004, p. 155). Many counseling centers find themselves understaffed and lacking key resources. A reemphasis on the importance of counseling center utilization by psychologically distressed students could be significant.

CHAPTER 2

LITERATURE REVIEW

The Problem of Depression

As the Chief of the Mental Health Service at Harvard University, Richard Kadison (2004) asserts depression is now an "epidemic" on college campuses across America (p. 95). Mood disorders like depression, bipolar disorder, and dysthymic disorder are extremely common in this country. The Depression and Bipolar Support Alliance announced there are 20.9 million Americans over the age of 18 that currently have a mood disorder; of that 20.9 million, 14.8 million are depressed (Depression and Bipolar Support Alliance, n.d.). Approximately 20% of all Americans will experience a true depressive episode at least one time in their lives (Gotlib & Hammen, 2002).

The inordinate amount of money being poured into anti-depressant medicine reveals how serious of an issue this has become. The sale of these drugs passed the 10 billion dollar mark by 2004 (Kadison & Digeronimo, 2004). Astonishingly, it is projected that by the year 2020, depression will be the leading source of disease burden in all established economies (Murray & Lopez, 1996).

In terms of the college age demographic, the American Psychiatric Association (2000) estimates that 10-25% of women and 5-12% of men suffer from major depressive

disorder. These percentages only reflect those struggling with major depression issues and do not take into consideration the countless others who suffer from depression on a less consistent basis. A national study that appeared in the American Journal of Psychiatry involving 8,098 participants revealed that individuals between the ages of 15 and 24 were the most likely to experience major depression (Blazer, Kessler, McGonangle & Swartz, 1994). This finding reiterates the intensity of depression among the college student population.

There are numerous studies within higher education that have exposed the levels of depression among the college student population. Although results have varied concerning the scope of depression, all research assures that a significant chunk of the college demographic is struggling with depression. Westefeld and Furr (1987) found that of 962 students who were surveyed, 777 (81%) said they had been struggling with what the students labeled as depression. Of this 81%, 42% believed depression to be a major problem on their campus (p. 7). A 2001 follow up study revealed that out of 1,455 students surveyed, 53% indicated they had dealt with what they would label as depression since they began their college careers (Furr et al., p. 3). According to the 2002 American College Health Association Survey results, 44.7% of the students admitted they had "felt so depressed that it was difficult to function at least one time within the last school year." Of that percentage, 7.1% of those students said that depression had occurred more than 11 times within the last school year (Kadison & Digeronimo, 2004, p. 240). These gripping statistics are further supported by Vredenburg et al. (1988) who found that 35 of the 74 college students in their study were depressed.

Most previously mentioned studies focused on the traditional 4-year college student. In 1995 Stuber and Otto investigated rates of depression among community college students to determine if depression was equally widespread. The Beck Depression Inventory (BDI) was administered to these students once in November and once in January of the same year. Interestingly, 34% of students were categorized as depressed on the November date and 31% on the January date (p. 283). Depression was found at much higher frequencies among the male students; 43% of the men were struggling with at least mild depression. Clearly, at both two and four year colleges, depression is a major issue.

What is Depression?

The Diagnostic and Statistical Manual of Mental Disorders indicates that depression exists when five or more of the following symptoms occur over a two-week span: Depressed mood most of the day, markedly diminished interest in most activities. significant weight loss or weight gain, insomnia or increased sleeping, restlessness or slowing down of body movement, fatigue, feeling worthless or guilty, decreased ability to think or concentrate, and recurring thoughts of death and suicide (American Psychiatric Association, 2000). Kadison (2004) describes the illness as much more than just feeling sad. Depression also affects the ability to think and reason as well as increased susceptibility to many other psychological problems including "anxiety disorders, eating disorders, substance abuse, and suicide" (p. 92). Individuals who continually experience periods of depression are known as having "unipolar depression" (Depression and Bipolar Institute, 2009). Unlike bipolar disorder, depressed persons only

experience feelings of being down as opposed to also having times of extreme high (Depression and Bipolar Support Alliance).

Periods of depression are defined as episodes. In Thomas Plante's book entitled *Mental Disorder of the New Millennium*, he postulates that the length of depressive episodes varies significantly between individuals, and some episodes can last as long as six months. Many people only experience a significant episode of depression once during their lives, yet others (approximately 20% of those who experience depression) will undergo the pain of intense episodes lasting two years or more (2006). Mondimore (2006) makes a clear distinction between depression and periods of sadness by explaining that when individuals are depressed, they begin to lose their ability to experience pleasure. This symptom is called "anhedonia". In contrast, if an individual is experiencing sadness, he or she can often push their feelings of despair aside and enjoy participating in activities that generate pleasure for a period of time.

Recent Trends in Depression

The upward trend in the prevalence of depression and other similar mental health diseases is alarming. Shockingly, 80% of college counseling center directors believe they have seen more students with serious psychological problems than 5 years ago (Kadison, 2004). "Everyone is reporting increased incidents of depressed students," according to Aruna Jha of the University of Illinois-Chicago (Miller, 2004, p. 1). It was reported that among colleges and universities in the United States between the years of 1989 and 2001, cases of documented depression doubled, incidents of suicidal students tripled, and the number of students who used psychiatric medicines jumped from 10 to 25 percent

(Hoover, 2003). Moreover, Vredenberg et al. (1988) report that the depressed subjects within their study identified the power and regularity of their depression as increasing during their college years. The large depressed population on college campuses should be a concern to everyone within higher education. If recent trends continue, the number of students affected with this terrible disease will only increase.

Depression May Lead to Suicide

Along with a swelling number of depressed students, the intensity of the illness is also increasing. This phenomenon can be seen through the problem of suicide. When the depth of a student's depression seems endless, suicide can seem like the only solution. Suicide has become the second leading cause of death among individuals attending a 4-year college or university, and 1 in 12 American college students will create a suicide plan (Kadison, 2004). In the National College Health Assessment Survey of 2002, 9.2% of the students said they had "seriously considered attempting suicide." Of this 9.2%, 1.6% stated they had attempted suicide within the last school year (Kadison, 2004, p. 240). Although this may not seem like an overwhelming statistic, at a college of 10,000 students, approximately 900 would be seriously thinking about suicide (Kadison, 2004). Although thankfully most of these students will not follow-through on these thoughts, all are seriously impacted by the depression's influence.

The intensity of the problem is undeniable. According to Paul Bradley (2006), 1,100 students successfully commit suicide each year. Bradley elaborates by stating that "the problem seems to be growing. National studies say college students increasingly are afflicted with mental illness and reporting suicidal feelings" (p. 1). If 1,100 students are

successfully committing suicide, this means that countless more are attempting. Recently, the U.S. government projected that for every successful completion of suicide among youth there are at least 100-200 attempts (Paladino, 2008). If this ratio holds true on college campuses, between 110,000 and 220,000 suicides would be attempted.

A 1988 study entitled "Depression in College Students: Personality and Experiential Factors" illustrates the implicit connection between depression and suicide. Of the depressed subjects within their study, 49% of them said that they had considered committing suicide in the past compared to only 13% of the nondepressed students (Vredenburg et al.). This unsettling suicidal ideation was further discovered when Lester (1990) found that 21.8% of the college students surveyed agreed that they had thoughts of killing themselves.

The Influence of Sex on Depression

It is important to consider the plethora of research indicating the differences between males and females in relation to depression. In her book *Sex Differences in Depression*, Nolen-Hoeksema (1990) confirms that women have both higher rates and increased symptoms of depression throughout the lifespan. Cyranowski et al. (2000) determined that at the age of 15, females had double the number of depression cases compared to men. Researchers found that this 2:1 ratio continues for another 35-40 years. Klerman & Weissman (1989) confirmed that females have a 2-3 times higher risk for depression across all ages. These findings must be taken into consideration when dealing with depression on college campuses.

Effects of Depression on College Students

While it would be beyond the scope of this literature review to address all of the effects of depression on college students, the following section will explore several key areas of interest.

Spirituality

There is a tremendous amount of research on the adverse affects that depression can have on almost every aspect of college students' lives. One of these areas pertains to spiritual health; those who experience depression generally experience lower levels of spirituality. Briggs and Shoffner (2006) desired to determine how depression influences four areas of spirituality: meaning and purpose in life, inner resources, transcendence, and positive interconnectedness. Results indicated that depression had a negative influence on all four areas of spirituality. An earlier study also detected lower levels of spirituality among those who indicated higher levels of depression (Brady et al., 1999). Similarly, Reinert and Bloomingdale (1999) found that higher levels of psychological distress were coupled with lower levels of spiritual support. Evidently, spirituality acts as a moderator between negative life events and levels of depression (Young, Cashwell & Shcherbakova, 2000). That is, higher levels of spirituality tend to help students look positively on negative life circumstance and therefore decrease the chance of depression.

Academic Achievement

A connection between academic impairment and heightened levels of depression is also supported in the literature. In a study entitled "Depression and Academic Impairment in College Students," 63 students struggling with depression participated. Of

these students, 58 (92%) were categorized as academically impaired which was "manifested as missed time from academic class, decreased academic productivity, and significant interpersonal problems at school" (Hiligenstein & Guenther, 1996). This crisis was especially true with students experiencing moderate-to-severe depression. Other research has also exposed analogous findings; depressed participants reported receiving lower grades and were less satisfied with their grades than their nondepressed counterparts (Vredenberg at al., 1988; Pritchard & Wilson, 2003). Hysenbegasi et al, 2005 found that depressed students reported missing over 11 more classes, one more exam, and over four more assignments than students who were not diagnosed with depression. Even more telling, the diagnosis of depression was associated with an average drop in GPA of .49.

Does depression cause academic impairment or does academic impairment cause depression? It seems as if it is a bit of both. Westefeld and Furr (1987) noted that grade problems were the most frequently cited cause of depression among 777 depressed students, indicating that the lack of academic success of the student may elicit depression symptoms.

Retention

Depression also seems to have a strong connection with student satisfaction with the college experience and retention levels. Vredenburg et al. (1988) discovered that depressed students not only had lower levels of persistence but were less confident in the decision they made to attend the university. Moreover, the intent to drop out was significantly influenced by emotional health (Pritchard & Wilson, 2003). With retention

becoming increasingly important in today's economy, the influence of depression on retention is very significant. However, when thinking about this issue it is imperative to place student health above retaining students.

Importance of Involvement

While every institution plays a vital role in creating an environment that fosters growth, ultimately most of the responsibility of ensuring that learning and development take place lies with the students themselves. Alexander Astin's involvement theory proposes that a student's active participation in the college environment is the key to student learning. Therefore, an active student is one who engages significantly in studying, is involved in student groups and organizations, spends ample time on campus, and has considerable interaction with faculty as well as other students. In contrast, an uninvolved student would be one who neglects these types of activities. Astin (1999) focuses on the behavior (what students actually do) rather than the thoughts or feelings that they may have. In response to this involvement theory, "student affairs professionals and other educators need to create opportunities for involvement to occur, both in and out of the classroom" (p. 27).

Astin's involvement theory has 5 main postulates, the latter two of which encompass the core of his thoughts:

The amount of student learning and personal development
associated with any education program is directly proportional to
the quality and quantity of student involvement in the program.

• The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. (p. 519)

Unlike content theories in which students assume a more passive role in the learning process, the involvement theory focuses on participation from both sides.

Motivating students to engage must happen for a facilitator to ensure that the best learning environment is being created

Very relevant to this investigation is the fact that Astin's involvement theory had its beginnings in a longitudinal study of college dropouts performed in 1975. The purpose of this research was to determine the factors that affected a student's likelihood of dropping out of an institution. The compelling nature of these findings provided the groundwork for Astin's theory. Every factor discovered that had positive influence on student persistence required an increase in student involvement. Conversely, all the factors leading to higher dropout rates were likely to reduce involvement (Astin, 1999). For example, students who obtained a part-time job on campus had a higher likelihood of staying in school because the job often got them involved in campus events and activities. Additionally, maintaining a GPA in the B range showed strong correlation with staying in school, while maintaining a GPA in the C range had the opposite effect (1975). Evidently, "students who are involved in the academic life of the institution are more likely to expend the effort necessary to get good grades than are students who are not involved" (p. 100). Participation in athletics and membership in fraternities and sororities also deterred students from dropping out of school. Unmistakably, active participation in

the college environment has enormous positive ramifications, and the validity of Astin's theory of student involvement is entrenched in much of the literature.

Effects of Involvement

The following sections will explore various impacts of student involvement.

Academic Success

In Abrahamowiczs' (1988) research on student involvement, those who participated in student organizations were much more likely to spend time in the library and interact with both faculty and peers outside of class about course learning. Astin (1992) concurs with the idea that involvement increases academic achievement. He determined that time spent studying is significantly correlated with "nearly all academic outcomes" (p. 375). Like time spent studying, students who engaged with faculty outside of class achieved at a higher level in all categories related to academic achievement identified in the study. Pritchard and Wilson (2003) also revealed that social health (which included membership in campus organizations) had a major effect on raising academic performance. DeBerard et al. (2004) noted that the level of social engagement is strongly correlated with academic achievement.

Personal Development

Cress et al. (2001) attempted to determine the developmental outcomes of college students involved in leadership activities. There were 14 positive development outcomes investigated including level of co-curricular involvement, understanding of self, conflict resolution skills, and decision-making abilities. Those involved in leadership on campus

responded at a higher rate than students who were not involved in all of the 14 categories. Abrahamowicz (1988) found similar results when looking into college involvement. The students who were members of organizations responded at higher levels than non members of organizations to all but one of 21 items in regards to gains in various areas of education.

A 1995 qualitative study performed by George Kuh appeared in the *Journal of Higher Education*. 149 students participated in interviews aimed at deciphering which types of involvement had the greatest impact on learning and development. Almost all types of out of class involvement, which Kuh named "the other curriculum," cultivated positive effects on the students; however, leadership responsibilities, interactions with peers, academic related activities, and faculty involvement had a particularly positive influence on the development of the participants. Kuh concluded his research by stating that "most participants in this study viewed their life outside the classroom as the 'real world' laboratory" in which much of their development took place (p. 145).

Retention

Abrahamowicz (1988) found that students who were members of organizations were also inclined to be more satisfied with their institution than the nonmembers, further illustrating the positive effects of involvement; 65% of members said they were enthusiastic about their college compared to 17% of non members (p. 237). In her study of institutional factors influencing student retention, Lau (2003) found "the individual student effort cannot be overemphasized" when it comes to which students decide to

complete college (p. 133). If students are not actively pursuing opportunities to get involved and create a sense of belonging, their likelihood of staying in school decreases.

Much of the research supports Lau's claims. A 2004 study concerned with retention issues among four-year private colleges found that "student involvement in campus life" was the fourth most important factor out of 24 items in terms of its impact on retaining students (Habley & McClanahan, 2004, p. 10). This connection between involvement and retention seems transferrable to community colleges as well. Derby (2006) found that students who attended community college and were involved in clubs or organizations on campus were more likely to complete their degree and less likely to drop out of the institution. In Astin's well known book *Preventing Students From Dropping Out*, he asserts that the level of involvement is strongly correlated with a student's chance of dropping out. Astin (1975) found that work study programs, having a job on campus, being involved in campus life and campus activities, studying abroad, participation in varsity athletics, involvement in social fraternities or sororities, or other extra-curricular activities are all factors that have a positive influence on a student's persistence. In essence, all of Astin's findings supported his involvement theory.

Connections between Depression and Involvement

Despite the fact that there is little research linking involvement and depression, there are some conceptual connections. For example, ample literature supports the idea that participation in physical activity (intramurals, intercollegiate athletics, working out, etc.) decreases the likelihood of depression. Taliaferro, Rienzo, Pigg, Miller and Dodd (2009) report that both men and woman who were physically active indicated decreased

levels of hopelessness, depression, and suicide. Upon the completion of their study, the researchers were able to declare confidently "that certain levels of physical activity relate to a reduced risk of hopelessness and depression, two major risk factors associated with suicidal behavior" (p. 433). In addition, moderately involved students have much lower levels of depression than those who have low levels of athletic involvement (Sanders et al., 2000). Beyond sports involvement, depressed students also engage less frequently in social activities and feel less comfortable when they do interact socially (Youngren & Lewinsohn, 1980).

Another connection can be seen through the lens of assertiveness. Assertiveness is an essential component of becoming actively engaged in the college environment.

Vredenburg et al. (1988) discovered that students who were depressed showed lower levels of assertiveness in terms of being involved with both professors and students. This finding was further supported by Olinger et al. (1987) who found evidence of a relationship between low levels of assertiveness and mild levels of depression. Youngren & Lewinsohn (1980) agree that assertiveness tends to be a problem for those who are depressed.

Loneliness and alienation are highly linked to depression; this association further connects involvement with depression. Being highly involved allows students to avoid feelings of being alone. However, when students experience loneliness, depression can begin to take a foothold. Westefeld and Furr (1987) cited loneliness as the main cause of depression for 47% of depressed participants. In a follow up study, loneliness was mentioned as the main cause of depression by 51% of the depressed students (Westefeld et al., 2001). Hagerty and Williams (1999) revealed that depression is also significantly

associated with low sense of belonging. This finding, which was consistent with other research, further exemplifies the vast importance of connectedness at college.

Additionally, the amount of social support given to students' experiencing loneliness decreases their susceptibility to negative psychological effects, promoting the relationship between involvement and mental health (O'Donovan & Hughes, 2007). Levels of loneliness are negatively correlated with social support, again illuminating the importance of being engaged in the college environment (Nicpon et al., 2006).

Feelings of alienation and loneliness are the number one cause of depression.

Aruna Jha and Robert Lees, the head of counseling at UIC, found "that the main reason behind depression was the feeling of alienation- especially when students felt disconnected from social groups or couldn't identify with their college" (Miller, 2004, p.3). In *College of the Overwhelmed*, Kadison expounds on this idea: "When this happens [alienation] some undergraduates will not tell anyone...they want an identity that appears to be strong and independent, even when it is actually insecure and painful" (2004, pp. 11-12).

Summary

Mental health issues, specifically depression, among the college student population are prevalent and their severity continues to grow (Kadison, 2004).

Additionally, female students have a higher probability of being depressed (Klerman & Weissman, 1989). Many other aspects of students' lives are affected when they struggle with depression, including the increase in susceptibility to suicide (Vredenburg et al., 1988), decrease in spiritual maturity (Briggs & Shoffner, 2006), impaired academic

achievement (Hysenbegasi, Hass & Rowland, 2005), and the dwindling tendency to remain in school (Pritchard & Wilson, 2003).

Equally important is the extent to which students are involved in their college experience (Astin, 1999). Academic success (Pritchard & Wilson, 2003), personal development (Cress et al., 2001), and propensity to remain in college (Lau, 2003) are all positively affected by a student being engaged. Although research has not directly explored the relationship between involvement and depression there are some possible connections that have been discovered (Taliaferro et al., 2009; Sanders et al., 2000; Vrendenburg et al., 1988).

Research Questions

The importance of both mental health and student involvement in the collegiate environment are undeniable, but are these two important issues correlated? This question provides the foundation for this study. More specifically, the intent of this research is to answer the following questions:

- 1. Are students who experience depression more or less likely to be actively involved?
- 2. Is there a difference in the levels of depression and involvement between male and female students?
- 3. Does the type of involvement differ for those who are depressed and those who are not?

It is important to keep in mind that for this study, three categories of involvement will be investigated: extracurricular, faculty and social. These categories will be

measured by involvement in clubs or sports, interaction with faculty outside of class, and social interaction with peers.

CHAPTER 3

METHODS

Instrument

This quantitative study will use the Higher Education Research Institute (HERI) 2008-2009 College Senior Survey (CSS). This research initiative is part of the Cooperative Institutional Research Program (CIRP) and is one of the oldest and most highly respected ongoing investigations in higher education. The CSS, along with other HERI instruments, has been the foundation for many important studies. *Four Critical Years:Effects of College on Beliefs, Attitudes, and Knowledge* (1977) and *What Matters Most in College: Four Critical Years Revisited* (1993) are two significant studies and widely referenced books by Astin that have been based on data derived from HERI instruments.

Despite the extensive use of this data, there is little evidence to pinpoint a particular reliability or validity of the CSS survey. Due to the nature of the survey and the self report aspect of the questions, reliability and validity are very hard to determine.

Nevertheless, some highly respected researchers, including Alexander Astin and William Korn, assure us that instruments like the CSS are very accurate in reflecting student values and outcomes. Because surveys like CIRP and CSS are given year after year, the

quality of the instrument is easily assessed; "the vast majority of CIRP Freshman Survey questions exhibit a great deal of stability over time. In other words, in repeated trials, the aggregate results remain very similar" (Higher Education Research Institute). Although this statement refers specifically to the Freshman Survey, many of the questions on the senior survey are the same or very similar. As a result, it can be assumed that the CSS instrument has the same qualities as the CIRP Freshman Survey.

Participants and Procedures

By using an existing data set, the participants will include all students who took the College Senior Survey at Taylor University in the springs of 2006 and 2008. This will provide a reasonable sample which should yield meaningful results. Permission to use this data will be sought once this proposal is approved; however, tentative approval has been received pending the completed proposal process.

Measuring Depression

The CSS contains one item where students must indicate how often they "felt depressed" during the last school year. Response options include: frequently, occasionally, or not at all. Students' responses to this item will be used to determine level of depression. This score will be compared to each student's overall involvement score in order to investigate whether or not a relationship exists.

Measuring Involvement

As previously discussed, the level of involvement will be established using three sub-scales comprised of engagement-related items from the CSS. These scales will focus

on the three main types of involvement that are highlighted in Astin's Involvement Theory. As established by Astin (1984), three critical domains of involvement are student-faculty interaction, participation in extracurricular activities, and engagement in academic work. The proposed scale items are listed in table 1. However, the scales may require alteration during the analysis phase to assure that acceptable reliability standards are achieved.

Academic Involvement Sub-scale

A single item measure will be used to indicate a student's level of academic involvement (see table 1). This item chosen has a wide range of responses giving a richer analysis and ability to further categorize students.

Faculty Student Interaction Sub-Scale

The faculty student interaction scale will be constructed from two variables: 1)

The amount of hours students spent talking with faculty during office hours in the past year; 2) the amount of hours students spent talking with faculty outside of office hours.

Each of these questions have 8 possible responses, from "none" to "over 20 hours".

Because of the number of possible responses, a richer analysis will be possible.

Extracurricular Sub-Scale

The extracurricular sub-scale will be comprised of two variables: 1) a questions measuring the number of hours students were involved in clubs and groups; 2) an item calculating hours spent with exercising and sports involvement. Because both these items have 8 possible responses (ranging from "none" to "over 20 hours"), a more detailed

analysis will be possible. There will be no need to run factor analysis on these variables considering the extracurricular sub-scale consists of only two items.

Scale Development

The analysis performed to clarify the involvement scales will have two steps: 1) potential items will be selected based on their conceptual consistency with involvement theory and representation of the three critical domains listed above; 2) items within the faculty student interaction sub-scale will be subject to factor analysis and reliability testing to establish that the scale meets acceptable standards. The items are broken into the three types of involvement highlighted in involvement theory (see table 1).

Table 1

Involvement Scale

Items	Scale of Measurement
Academic Involvement	
 During the past year, how much time did you spend during a typical week doing the following: Studying/homework. 	Rated on an 8 point scale from 0 = none to 7 = over 20 hours
Faculty Student Interaction	
 Talking with faculty during office hours Talking with faculty outside of class or office hours 	Rated on an 8 point scale from 0 = none and 7 = over 20 hours
Extracurricular Involvement	
Exercising/sportsStudent clubs/groups	Rated on an 8 point scale from 0 = none to 7 = over 20 hours

In order to establish the internal consistency of the faculty-student interaction scale, a reliability analysis will be run to determine the degree to which the items related to one another. Based on Alpha scores, items will be deleted to enhance the overall Cronbach's Alpha. Results from a factor analysis will also be given consideration in the removal of items. In order to stay consistent with statistical methods, only items that receive a Cronbach's Alpha score of .6 or higher will continue to the next step of the scale development process.

In conjunction with the reliability assessment, a factor analysis will be used to establish the amount of shared variance that exists between the items that make up a scale (Mertler & Vannatta, 2002). Overall the goal of factor analysis is to determine the underlying factor structure of the scale. Furthermore, this analysis will determine how many latent variables are present, informing the researcher if one broad scale or several smaller constructs are needed. The latent variable refers to the overall "phenomenon or construct" that the scale is meant to measure (DeVellis, 1991, p. 12). Factor loading scores are the main results attained from factor analysis and specify the strength of the relationship between the individual item and the factor (or latent variable). It is recommended that items scoring at or higher than a .4 factor loading score be used that have cross-loading scored on other variables; this process will be administered for the development of the involvement scale.

Proposed Analysis

Following the scale development of the three involvement scales, a 2 x 2 Analysis of Variance (ANOVA) will be used to test for changes in the measures of faculty/student

interaction, academic involvement, and extracurricular involvement scales in comparison with depression scores.

CHAPTER 4

RESULTS

Demographics of Participants

In total, the sample consisted of 415 senior students who completed the CSS and during 2006 and 2008 at a small, Christian, liberal arts institution located in the Midwest. Significant data was missing for three students, leaving a 412 student sample. Out of those 412, 176 were male (43%) and 236 were female (57%). The breakdown of depression responses were as follows: 187 students responded "not at all", 195 students responded "occasionally", and 30 students responded "frequently".

Scale Development

Because the three involvement sub-scales were all constructed from two items or less, no reliability testing or factor analysis was necessary. Despite the limited number of CSS items in each scale, each item used had eight possible responses (from "none" to "over 20 hours"), giving significant depth to the analysis.

Descriptive Statistics

Females reported depression more often than males. In fact, while only 39.7% of females responded "not at all" when asked how often they experienced depression, over half of all males (51.4%) reported never feeling depressed. Additionally, 51.9% of

females "occasionally" felt depressed while only 41.3% of males felt depressed "occasionally". Those "frequently" depressed remained similar between sexes at 7.1% for females and 7.3% for males. When combining males and females, 55.3% of all students acknowledged feeling depressed at some level; this statistic is noteworthy and corresponds with the literature.

Table 2

Descriptive Statistics on Levels of Depression and Three Types of Involvement

Variables and Source	Mean	Standard Deviation	Number
Extra-curricular involvement			
Not at all	2.13	1.05	184
Occasionally	2.25	1.02	197
Frequently	2.23	1.26	31
Faculty Involvement			
Not at all	4.28	1.39	187
Occasionally	4.31	1.24	198
Frequently	4.10	1.12	31
Academic Involvement			
Not at all	5.61	1.46	187
Occasionally	5.82	1.44	198
Frequently	6.07	1.46	31
Total			
Extra-curricular involvement	2.19	1.05	416
Faculty involvement	4.28	1.30	416
Academic involvement	5.74	1.45	416

Inferential Statistics

Academic Involvement

To examine the influence of sex and depression on academic involvement, a 2 (sex) X 3 (depression level) Analysis of Variance (ANOVA) was run (see table 2). No significant (p>.05) main effect was found between the level of depression and amount of academic involvement. However, a significant main effect (p=.009) was found between sex and academic involvement with the mean score for females being 5.97 and the mean score for males being 5.43. This finding indicated that female students were significantly more likely to engage in academic activity (hours spent studying/doing homework) during their college experience. Additionally, no interaction effect was determined between sex and level of depression.

Faculty Involvement

In order to determine the impact of sex and depression on faculty involvement, a 2 (sex) X 3 (depression level) Analysis of Variance (ANOVA) was performed. There were no significant main effects (p>.05) found between both the level of depression and sex on the amount of faculty involvement. In addition, there was no significant (p>.05) interaction effect between sex and depression. However, there was an effect size of .248 in relationship to faculty involvement between students who were occasionally depressed and those who were frequently depressed. Given the relatively small sample size of the "frequently depressed" group (n=31), this small effect size is notable (Cohen & Lea, 2004) given that traditional significance testing may be unable to detect significant differences.

Extracurricular Involvement

A 2 (sex) X 3 (depression level) Analysis of Variance (ANOVA) was performed to determine the effects of sex and depression on extracurricular involvement. No significance (p<.05) was found between both the level of depression and sex of the student on the amount of extracurricular involvement. Furthermore, no significant interaction (p<.05) effect between sex and depression existed.

Disproving the hypothesis, there was no significance found between level of depression and amount of involvement in any of the sub-scales. Depression levels exerted greater influence on extracurricular involvement compared to faculty-student interaction and academic involvement, but this effect was still not statistically significant (see table 2). The sex of the student did not significantly impact faculty-student interaction or extracurricular involvement, however, male or female status significantly impacted the academic involvement measure (studying/homework) (p<.1).1 Furthermore, no significant interaction effect existed between sex and depression for any measure of involvement.

Table 3

One-way Analysis of Variance for Effects of Depression on Types of Involvement

Variables and source	<u>df</u>	<u>SS</u>	MS	<u>F</u>	Sig				
Extra-curricular involvement									
Sex	1	.231	.231	.052	.820				
Depression	2	10.586	5.293	1.184	.307				
Sex X Depression	2	7.843	9.922	.877	.417				
Faculty involvement									
Sex	1	.364	.364	.216	.643				
Depression	2	.524	.262	.155	.856				
Sex X Depression	2	4.855	2.428	1.438	.238				
Academic involvement									
Sex	1	14.026	14.026	6.841	.009				
Depression	2	4.072	2.036	.993	.371				
Sex X Depression	2	.199	.099	.049	.953				

CHAPTER 5

DISCUSSION

The purpose of this research was to identify the possible connection between levels of depression and amount of involvement in college students. Involvement (dependant variable) was investigated holistically, including extracurricular, faculty interaction, and academic involvement. A self reported measure of depression (independent variable) was used to classify students as never, occasionally, or frequently depression during their college years. Sex was also examined to establish if male or female status affected levels of depression or amount of involvement. Surprisingly, depression did not significantly influence any of the three involvement categories. However, sex significantly interacted with academic involvement. Furthermore, female students were more likely to experience depression.

The fact that depression did not seem to influence involvement is puzzling considering much of the literature indicates that depression is connected to not being assertive (Vredenburg et al., 1988; Olinger et al., 1987), experiencing loneliness (Westefeld & Furr, 1987), and feeling alienated (Miller, 2004). Logically, these dispositions would prohibit students from actively engaging in their college environments, but this particularly research does not support that presupposition.

Since the results run counter to the literature, one must ask: why do these results fail to indicate a connection between depression and involvement? Possibly, many depressed students may be forcing themselves to stay involved even when they don't feel like being an active participant. Generally, students who are depressed will hear from parents, doctors, or friends how vital it is they remain active; withdrawal promotes alienation and lonliness. Because of this, students may remain committed to their activities despite their battle with depression. If Aruna Jha is correct in thinking alienation is at the root of depression, students could possibly be fighting against distancing themselves from campus by remaining engaged (Miller, 2004).

The rise in use of depression medication could also be reducing the influence depression has on student involvement. Although students who are well medicated may not be experiencing depression symptoms, they may still label themselves as depressed because they are on anti-depressant medication. Kadison and Digeronimo (2004) reported that the sale of antidepressants passed the 10 billion dollar mark in 2004. These remarkable findings prove just how many depressed individuals are medicated. This concept is significant when discussing findings from this research. It is likely that a many depressed students were medicated during college. If this assumption is correct, the influence depression had on their involvement would be minimized if their mediation was effective. If taking antidepressants suffocates feelings of loneliness, alienation, and despair, students would be more apt to be engaged. The effects of medication could have prohibited significant findings.

Given that the involvement scales were constructed from self-reported measures, the involvement level of students could have been inflated. Involvement is highly valued

within higher education (Astin, 1999), and students realize that the more involved they seem, the more their peers, professors, and institution will respect them. As a result, intentionally (or unintentionally) inflating time spent involved in activities seems like a plausible deduction. By nature, people desire to reflect themselves positively when partaking in research that reveals their habits and practices. If depressed student's involvement levels were observed and reported by an outside researcher, results may have been very different.

Due to the nature of small liberal arts institutions, a large amount student involvement is often necessary to sustain curricular and co-curricular activities. As a result, the opportunities and necessity for significant engagement are arguably greater at a smaller institution. Because this research was conducted at a small university, the aforementioned phenomenon could explain inflated levels of involvement for depressed students.

Similarly, since depression was self-reported, students could have inaccurately measured their depression levels. Opposite of involvement, depression is a characteristic that most students do not want to be associated with. Therefore, minimizing struggles with depression would be the tendency. Often times, it takes a caring individual on the outside to accurately assess depression symptoms. If depression levels were minimized, significant results between depression and involvement would be less likely.

Furthermore, since depression levels were determined by responses to a single CSS item the depression measure was not very powerful.

The amount of academic involvement between male and female students proved to be a significant finding. There are numerous explanations for why this phenomenon occurs, and this finding is consistent throughout research. For whatever reason, females tend to view academics more seriously. Consequently, they spend more time studying and often experience greater academic success. The lower level of academic involvement among male students is an important finding. Because depressed students have the tendency to struggle academically (Hysenbegasi et al. 2005), it is extremely important ensure that depressed students have high levels of academic engagement.

Limitations

Having a self reported independent variable (depression) is a notable weakness of this study. Often times, those who experience mental health illness, like depression, have trouble accurately evaluating their own levels of depression. Usually it takes an individual from the outside, like a counselor or medical doctor, to best represent depression experiences. Because the students themselves were asked to determine depression levels, many students could have over or under estimated their depression. Since depression is viewed as a negative characteristic, many students who were depressed could have chosen not to report these struggles.

Similarly, the three involvement scales (dependant variables) we constructed from self-reported variables. Students were expected to assess the amount of time they spent engaged outside of the classroom on their own. Ideally, involvement would be discovered using a more anthropological approach where student behavior was observed or recorded to ensure accuracy. Any time students are asked the evaluate their own lives, there can be a tendency to misrepresent actual occurrences.

The few number of students who reported "frequently" struggling with depression (30 out of 425 participants) limits the depth of analysis. Depression, as it is discussed in the literature review, refers to more significant forms instead of occasional incidences. Because of this, in order to receive an accurate view of how depression influences involvement, having a greater number of participants dealing with significant depression would have been ideal. With a majority of depressed students only occasionally experiencing depression, the effects depression had on involvement are muffled. Because the study used existing data, the options for a depression measure were limited.

In addition, the depression measure had few categories, making the depth of analysis limited. It would have been more useful if the CSS provided more than three levels of depression. Additionally, having several related items with which to form a depression scale would have been very helpful. Given the lack of diversity of responses, further categorizing those who "occasionally" felt depressed was not a possibility. If there was a way to break down the "occasional" response into several categories, there could have been a richer analysis.

It could be argued that even completing the CSS survey is a form of student involvement, therefore, one might speculate the students willing to do so would also be more involved than students who were reluctant to participate. If this assumption is correct, a majority of the sample would score well on involvement measures regardless of their depression experiences. Conversely, it would be likely that seriously depressed students would be reluctant to complete the survey.

Implications for Research

The unmistakable evidence of the literature indicating that depression is an issue among college students, coupled with the inconclusive nature of the results of this study, clearly points to a need for further research in this area. There was no significant relationship found between depression and involvement within this sample of 412 students, however, this insignificance is not consistent with other higher education research. In fact, the literature identifies multiple indirect connections (lack of assertiveness, loneliness, alienation etc.) between the existence of depression and lower levels of involvement. The disconnect between results from this study and the literature underscores the need to investigate depression and involvement further.

The most significant weaknesses of this study were the lack of a more robust measure of depression and the small number of students who indicated that they significantly battled depression. Most students who fell into the depressed category identified only occasionally struggling with depression, thus failing to capture the influence that more significant forms of depression can have on students. While it is reasonable to speculate that students who struggle with depression are less likely to be fully involved, these results do not support that conclusion. Perhaps a qualitative study with students diagnosed with depression would more accurately explain the influence frequent depression has on involvement

There were significant findings connecting how sex affected involvement; female students tended to be more engaged than men. While not the focus of this study, this is interesting because of the current interest in male disengagement. Ample research has

highlighted lack of male involvement as a trend in higher education. In fact, "many administrators often say male students are increasingly withdrawing" (Harper & Quaye, 2008). These thought by administrators not only reflect the disengagement of men once on campus, but also highlight trends regarding the lack of men pursuing a college degree and successfully graduating compared to women (Mortenson, 2003). This study affirms the idea that men struggle with being involved in the college environment, and particularly with academic endeavors. Since the focus of this study was on depression and involvement, the sex and involvement interaction was not thoroughly investigated. More research should be done to additionally uncover and explain the levels of involvement with male and female students.

Lastly, students indicating depression student from this sample seemed to participate at similar levels to those students who did not indicate depression. Further research should be performed to determine whether little significant between depression levels and involvement is a more consistent finding. Perhaps investigating the experiences of depressed students more broadly would provide insight as to why moderate depression does not seem to impact involvement.

Implications for Practitioners

First, like most research, about half of the students in this study struggled with depression at some level. Higher education practitioners must intentionally provide services that support students struggling with depression and other mental health issues. Caring for students holistically is paramount. Students will not have a successful college experience academically if their mental health needs are not being cared for. In an age

where mental health issues are dramatically increasing, colleges and universities must be committed to providing excellent counseling services for students. Furthermore, residence life staff must be trained to specifically deal with depression. At primarily residential colleges, residence life professionals, perhaps more than any other employees, have the most contact with students. Most likely, it will be the resident directors or resident assistants who first identify and deal with depressed students. Consequently, resident life staff must be trained to identify depression symptoms and be prepared to offer effective support.

This research highlights the need to ensure male involvement on campus.

Consistent with the previous research (Mortenson, 2003; Harper and Quaye, 2008),
female students were more academically involved than men. Given the importance of
involvement on the success of a college experience, practitioners must be intentional
about encouraging male students to participate. In particular, teaching faculty must
pursue contact with male students outside of class. As this research shows, male students
interact with faculty less than female students. Therefore, teaching faculty cannot wait for
male students to initiate contact. Instead, instigating interaction with male students is a
must for all practitioners. Additionally, academic services need to be clearly articulated
to male students.

The notable effect size in regards to faculty involvement between those frequently and occasionally depressed suggests that depression can influence a student's susceptibility to pursue contact with faculty. Because of this tendency, practitioners must take initiative to pursue interaction with students. Typically, depressed students struggle to muster up energy and motivation to seek out faculty relationships. To most effectively

service students, teaching faculty and student development professionals must take an active role in relating to students, particularly those who seem depressed or disengaged.

There was no significant found between level of depression and involvement. Accordingly, increased levels of depression did not promote decreased levels of involvement. Evidently, students who are depressed are remaining as active as their non-depressed counterparts. As a result, higher education practitioners will not always be able to identify who is depressed by who is disengaged. This means practitioners must be even more proactive about identifying those with mental health needs. For this to be accomplished, practitioners must get to know students on a deep level, emphasizing the importance of serving students through relationships.

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