

Social Support, Self-Efficacy and Depression of College Students

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ABSTRACT

Today's College students have multiple roles and obligations to fulfill. Having too many roles or obligations can result in severe depression. This paper proposes that social support and self-efficacy could help to reduce the depression level of college students. A survey is administrated at a historically black university in the southeastern part of the United States. We find that social support and self-efficacy are negatively related to depression in college students. In addition, we also explore different sources of social support and gender differences in seeking social support. This research paper will help to strengthen mental health of the young generation.

Keywords: Social Support, Self-Efficacy, Depression, college students

1. INTRODUCTION

For many students, college is the first time they have been away from home for any great length of time and they do not have the necessary skills to cope with this transition. When they leave home for the first time, they have a reduced social support from their family, friends, and other organizations. They are also embarking on a new phase of their life in which they are questioning their self-efficacy or their internal ability to successfully meet the challenges that they will face as college students (Bandura, 1977; Bandura, 1997; Colodro, Godoy-Izquierdo, & Godoy, 2010; Nebbitt, 2009; Trouillet, Gana, Lourel, & Fort, 2009).

Not only freshman students, many college students feel “so depressed that it is difficult to function” at some time according to a research conducted by the American College Health Association–National College Health Assessment (ACHA–NCHA—a nationwide survey of college students at 2- and 4-year institutions) in 2011 (American College Health Association, 2012).

Today’s normal college student is no more an 18-year-old fresh high-school graduate who enrolls as a full-time student, has limited work and family obligations. Present days students are older, more diverse and have more work and family responsibilities to balance (Center for Postsecondary and Economic Success, 2011). According to a research conducted by U.S. Department of Education, 43% of college students are employed full time and 32% are working part time. In addition, 23% of college students are parents and 13% are single parents. Therefore, many college students may have a difficult time during their college career trying to balance family, work and college. Balancing these multiple roles makes some college students stress or depressed.

Depression leads to negative effect on college students. Eisenberg, Gollust, Golberstein, and Hefner (2007) found that students with depression have worse academic performance. Studies suggested that college students who have depression would like to smoke more (Cranford, Eisenberg, & Serras, 2009), do not necessarily drink more but more likely to experience problems related to alcohol abuse, such as drinking to get drunk or engaging in unsafe sex (Weitzman, 2004). In addition, Depression is also a major risk factor for suicide (Garlow, Rosenberg, Moore, Haas, Koestner, & Hendin, 2008), which is the third leading cause of death for teens and young adults age 15 to 24 (Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005).

Therefore, it is important to find out what leads to depression in college students. Social support and self-efficacy has been explored as predictors of depression level separately by different studies (Roma, Myers & Brown, 2010; Trouillet, Gana, Lourel & Fort, 2009). Relatively little research has been done using both social support and self-efficacy as predictors of depression. Trying to fill this gap, this paper will explore the influence of social support and self-efficacy on depression. We will also study the correlation between social support and self-efficacy. And more importantly, compare which one of the two predictors is significant. This study will examine impact on depression level in a historically black college and university, where majority of the survey respondents are African Americans. This paper will not only make contribution to advancing research in the education research, but will also help to avoid depression in students of current generation and eventually lead to strengthen mental health of the young generation.

2. LITERATURE REVIEW

2.1 Self-Efficacy

Self-efficacy has been studied extensively since Albert Bandura first published his theory in 1977. Self-efficacy is defined as a person’s internal ability to successfully meet the challenges that one faces (Bandura 1977; Bandura, 1997; Colodro, Godoy-Izquierdo, & Godoy, 2010; Nebbitt, 2009; Smith & Betz, 2002; Trouillet, Gana, Lourel & Fort, 2009). Bandura (1986) stated that self-efficacy is not the actual ability to complete tasks but the person’s perception of their ability to complete that task (Bandura 1977; Bandura 1986, Bandura, 1997; Nebbitt, 2009; Smith & Betz, 2002). This study will also examine self-efficacy as a person’s perception and not their actual abilities. Self-efficacy is also considered a resource as it helps in a person’s ability to cope and as their ability to cope increases so does their levels of self-efficacy (Bandura 1977; Trouillet, Gana, Lourel & Fort, 2009). The perception of self-efficacy also is the perception of one’s control over their environment and this helps a person navigate life’s challenges in a positive manner (Bandura, 1997; Smith & Betz, 2002). For example, teachers with high self-efficacy are believed to be more likely to act in a confident manner by designing lessons that promote student-initiated inquiry and encourage

collaboration among students, and to persist longer on their tasks (Bandura, 1977; Enochs, Smith & Huinker, 2000; Gibson and Dembo, 1984; Haney, Lumpe, Czerniak, & Egan, 2002; Worch, Li, & Herman, 2013). Self-efficacy is considered to influence how one faces external situations (Trouillet, Gana, Lourel, & Fort, 2009).

This confidence or self-efficacy is a person's ability to take knowledge and skill and then change it into a positive coping strategy (Nebbitt 2009). A person can get this confidence from a number of places including a positive perception of community, which can help increase a person's levels of self-efficacy (Nebbitt 2009). Although a person says they have higher levels of self-efficacy, this may not be accurate or produce the desired results, but it may aid in the motivation to improve performance and self-efficacy (Bandura 1997). Bandura also stated the self-efficacy statements are not influenced by the desire to appear socially acceptable. This is due to a person gaining knowledge about his or her abilities, not based on thinking but on an evaluation of numerous past instances of achievements or failures (Bandura, 1997). These achievements or failures for young adults are experienced mostly through school and various social interactions.

Young adults with high levels of self-efficacy will meet the challenges faced within a college setting with confidence as opposed to anxiety (Jerusalem and Mittag, 1995). Whereas, young adults with low levels for self-efficacy could interpret challenges within the college setting as being personally responsible for failure more than the successes (Jerusalem and Mittag, 1995). College students with high self-efficacy have better academic performance (Choi, 2005), enhance their motivated learning (Schunk, 1985). According to Jerusalem and Mittag (1995), self-efficacy is considered changeable and less stable in young adults such as college age individuals, even though self-efficacy is viewed as a personality trait. In young adults, some personality traits are still being stabilized and will become so with added experiences. These experiences will enable increased positive experiences and this will in turn increase self-efficacy (Bandura, 1977; Zeiss, Lewinsoln, & Muñez, 1979).

2.2 Social Support

Social Support is a network of people and/or organizations that a person turns to in times of need or stress. This network can come from several different sources including but not limited to family, friends, co-workers, religious organizations, and or special groups. Each of the listed social support groups has different effects on an individual. Take family support for example, a study by Brookmeyer, Henrich, Cohen, and Shahar (2001) states that family support can be an important buffer for environmental risks such as violence. Whereas, young adults find that friends that are supportive are important for good mental health as school becomes more important (Auerbach, Begda-Peytom, Ebertert, Welk, & Ho, 2010). Freidlander (2007) found that for freshman college students that friends played a major role in adjustment and was a better predictor of social support than by parents during the first year of college. This is mainly the case with the individual is living mainly in the residence halls and depend more closely on friendships to manage stress (Friedlander, 2007).

As with self-efficacy, social support is measured as the perceived amount of support not the actual amount of support an individual has within their environment on their coping abilities (Trouillet, Gana, Lourel, & Fort, 2009). Social support is also thought of in the literature as a personality construct (Gayman, Turner, Cislo, & Eliassen, 2011; Steer & Beck, 1985). This personality construct acts as a buffer for negative life events (Robbins, Lese, & Herrich 1993). Individuals that are of sound mind may need social support and encouragement from others to deal with normal everyday stressors (Robbins, Lese, & Herrich 1993), and social support acts as a protector from these stressors or stressor related like symptoms (Lee, Detels, Rolheram-Borus, Duan, & Lord, 2007; Roma, Myers, & Brown, 2010; Robbins, Lese, & Herrich 1993).

When an individual feels that their social support system is not providing them the support they need the individual then starts to develop negative self-images and feel that they will not be able to overcome their issues (Bandura, 1977; Zeiss, Lewinsoln, & Muñoz, 1979). Traditional aged college students in a study by Wei, Russell, & Zakalik (2005) found that social support mediates loneliness and depression when the individual moves away from home for the first time. This loss of social support of the parents can create stress within in the individual that needs to be compensated for by peer social support. Social support is a very important part of an adolescent's feelings of being loved and valued (Auerbach, Bigda-Payton, Eberhart, Webb, & Ho, 2011).

2.3 Depression

Depression among adolescence is a concern for college personal, this is especially true since a study by Lee, Detels, Rotheram-Borus, Duan, and Lord (2007) found that females are twice as likely to have depressive symptoms as opposed to males. Although this is true, another study by Grant, Marsh, Syniar, Williams, Addlesperger, Kenzler, & Cowman (2002) found that commuter males have a higher likelihood of depression than females that are non-commuter. The second study may be the better explanation due to the support of the institution and the less frequency that young adolescent depending on parental support. Whereas, Wong and Whitiker (1993) did a cross-sectional study of students freshman through graduates and they found that freshmen students had the highest levels for depression. Individuals that experience depression has fewer social interactions, are less verbal, have a slower response time, request and have less social interaction than their counterparts (Friedlander, 2007; Zeiss, Lewinsoln, & Muñoz, 1979).

Depression as a syndrome is a cluster of different things such as sadness, negative self-concept, and sleep/appetite disturbances (Kendell, Hollon, Beck, Hammen, & Ingram, 1987). Adolescents are at a time of rapid change, transitions, emotional and intellectual growth where many may experience depressive symptoms (Auerbach, Bigda-Payton, Eberhart, Webb, & Ho, 2011). By the time young adults reach college they will have experienced at least one depressive episode (Auerbach, Bigda-Payton, Eberhart, Webb, & Ho, 2011). As young adults focused more on school, peer support becomes even more critical for good mental health (Demaray, & Malecki, 2002).

3. CONCEPTUAL MODEL AND HYPOTHESES

There is little research that examines self-efficacy, social support and depression together. Most studies examine these three variables in different combinations such as: self-efficacy with depression; and social support with depression. The research on both sides provides new insights and a good empirical start to understanding the role of social support, self-efficacy and depression within the general population of college students.

Individuals that are of sound mind may need social support and encouragement from others to deal with normal everyday stressors (Robbins, Lese, & Herrich, 1993), and social support acts as a protector from these stressors or stressor related like symptoms (Lee, Detels, Rotheram-Borus, Duan, & Lord, 2007; Roma, Myers, & Brown, 2010; Robbins, Lese, & Herrich 1993).

Since social support can help individuals to overcome difficulties such as stressors or stressor related like symptoms (Lee, Detels, Rotheram-Borus, Duan, & Lord, 2007; Roma, Myers, & Brown, 2010; Robbins, Lese, & Herrich 1993). Therefore, we hypothesize:

H1: Self-efficacy and social support will have a positive correlation.

In the study by Roma, Myers and Brown (2010) there is a negative relationship between self-efficacy and depression. So as perceptions of self-efficacy become lower depression symptoms raise and vice versa. Withdrawal is also linked to self-efficacy as a symptom of depression (Harrell, Mercer, DeRosier, 2009).

When an individual has high levels of self-efficacy as a coping strategy the individual will have lower levels of depression because of the direct or indirect use of this resource (Trouillet, Gana, Laurel, & Fort, 2009). Follow them, we hypothesized that:

H2: Self-efficacy has a negative influence on depression.

Social support can also help prevent depressive symptoms in college students (Trouillet, Gana, Laurel & Fort, 2009). Individuals that experience depression have fewer social interactions are less verbal, have a slower response time and request and have less social interaction than their counterparts (Gayman, Turner, Cislo, Elissen, 2011; Zeiss, Lewinsoln, & Muñez, 1979). They also experience depression when they feel that their social support system does not provide the support that the individual needs (Zeiss, Lewinsoln, Muñez, 1979). In some cases the availability of social support is enough to mitigate depressive symptoms (Abramowitz, Koenig, Chandwani, Orban, Stein, LeGrange, & Barmes, 2009). Young adolescents that are satisfied with their levels for social support report lower levels of depression (Abramowitz, Koenig, Chandwani, Orban, Stein, LeGrange, & Barmes, 2009). In several studies higher levels of social support predicted lower levels of depression in college students (Gaylord-Harden, 2007; Johnson 1999; Lindsey, Joe, & Nibbit, 2010; Zimmerman, 2000). Perceived social support is one factor that plays an important role in the onset of depression in adolescents (Auerbach, Bigda-Payton, Eberhart, Webb, & Ho, 2011). Follow these literature, we proposed that:

H3: Social support has a negative influence on depression.

H4: The influence of Social support on depression will be higher than the influence of self-efficacy on depression.

This study hypothesizes that self-efficacy and social support will have a positive correlation, and both will have a negative correlation with depression level. However, social support is believed to have a higher correlation with depression levels than self-efficacy. This study will examine which variable is a better predictor of depression levels for traditional aged college students. Finally, males and females will be examined separately to determine if there is a difference between the social support and self-efficacy variables as predictors of depression levels, as well as the strength of that relationship. Please See Figure 1 for the conceptual model.

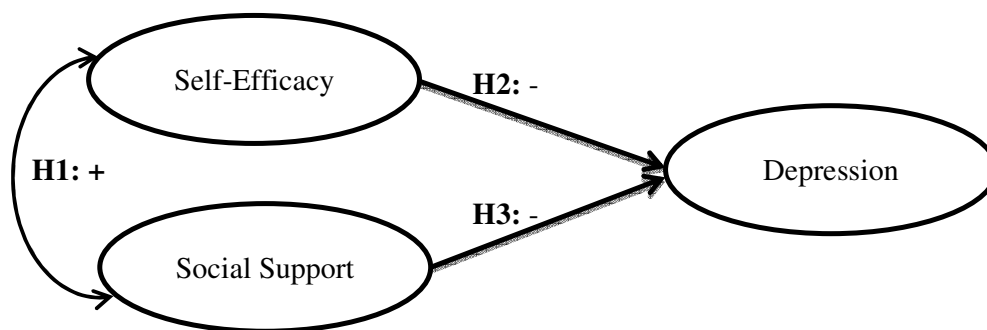


Figure 1 Conceptual Model

4. METHODS

This study examines self-efficacy and social support as predictors of depression for traditional aged college students. A questionnaire packet is developed, including demographic information (gender, age, class rank, grade point average, ethnicity and where they live), Beck's Depression Inventory (BDI) (Beck

and Steer 1987), Self-Efficacy Scale (SES) (Sherer& Adams 1983), and Young Adult Social Support Index (YA-SSI) (McCubbin, Patterson, &Grochowski 1984).

Depression. The depression inventory measure an individual's level of depression. The Beck's Depression Scale (BDI) (Beck and Steer 1987) can be used as a continuous variable or as a categorical variable. For this study, the scale will be used as a continuous variable. There are 21 items on this inventory. The items are scored based on the participants answer to the list of questions. For example, if the participant circled the first statement for the question then the score is zero. The higher the score on the inventory the higher the depression level for that individual. This study is using the BDI because it is a sensitive measure of syndrome depression (Kendell, Hollon, Beck, Hammen, & Ingram, 1987).

Self-efficacy. The self-efficacy inventory measures an individual's level of self-efficacy or one's internal belief that challenges can be met with success. The Self-Efficacy Scale (SES) (Sherer& Adams 1983) contains 18 items to measure self-efficacy, and seven filler items for a total of 25 items. This inventory was a five-point Likert scale ranging from one (disagree strongly) to five (agree strongly). A higher score on the inventory indicates a higher level of self-efficacy.

Social Support. The social support inventory measure an individual's level of social support from five different types of support: emotional, esteem, network, appraisal, and altruistic. The Young Adult Social Support Inventory (YA-SSI) (McCubbin, Patterson, &Grochowski, 1984) containing 77 items. The higher the score on the inventory indicates a higher level of social support.

A pen and paper survey was administrated at a comprehensive historically black university in the southeastern part of the United States. Authors randomly walked into classrooms to ask the permission of instructors and explained the purposes of the research to students. Volunteers were given the survey package and were asked to finish it in 15 minutes.

Table-1. Demographical Characteristics (n=155)

Characteristics	%	Characteristics	%	Characteristics	%
Gender		Major		Current standing	
Male	38.7	Business Administration	43.4	Fresh	63.2
Female	61.3	Liberal Arts & Social Science	56.6	Sophomore	22.6
Age		Overall GPA		Junior	3.9
18-23	94.8	A	8.6	Senior	9.7
24-29	3.2	B	46.7	Graduate	0.6
30-35	1.3	C	41	Ethnicity	
48-53	0.6	D	3.8	African American	90.9
Employment Status		Commuting status		White (Caucasian)	2.6
Full time	96.1	Non-commuting	73.3	Hispanic/Latino/ Spanish origin	3.2
Part time	3.9	Commuting	26.7	Asian	0.6
				Other	2.7

Participants consisted of 155 students (60 males and 95 females) with 126 living in the residence halls and 39 commuters. Most of them were from various classes within the College of Business Administration and the College of Social Sciences. The majority of participants were between the ages of 18-23 years of age (147 participants), there were 98 participants ranked as freshman students. There were 2.6% Caucasians, 90.3% African American and 7.1% classified as other within the sample.

5. DATA ANALYSIS AND RESULTS

The cronbach alpha for depression (0.91), self-efficacy (0.71) and social support (0.94) are acceptable (Hair, Anderson, Tatham, & Black, 1998). All items on the SES (self-efficacy), YA-SSI (Young Adult Social Support Inventory), and BDI (Beck's Depression Inventory) were summed to create a total sum scores for each. The total summed scores were used in the regression analysis. The dependent variable was depression and the predictor variables were self-efficacy and social support. Gender, commuter status, overall grade point average, age, major, class rank, and attendance status are included as control variables. A correlation matrix is shown in Table 2 (to avoid confusion, we do not include the control variables in the correlation matrix).

Table-2. Descriptive Statistics and Correlation Matrix

	Mean	Std.D	Skewness	Kurtosis	Depression	Self-Efficacy	Social Support
Depression	8.06	7.96	2.26	7.16	(0.91)		
Self-Efficacy	102.57	11.31	-0.19	-0.21	-.381*	(0.71)	
Social Support	149.95	23.32	0.06	0.10	-.434*	.351*	(0.94)

*Significant at the 0.01 level. The cronbach alphas are in the parenthesis.

As shown in Table 2, Self-efficacy is negatively correlated with depression ($r = -0.381$, $p = 0.01$). Social Support is negatively correlated with depression ($r = -0.434$, $p = 0.01$). Social support is positively correlated with self-efficacy ($r = 0.351$, $p = 0.01$). These results are consistent with our hypotheses 1, 2 and 3.

To test how well predictor variables account for the variation in depression multiple regressions were conducted using SPSS. To control the effect of relevant variables, we used hierarchical regression. In the first model, we put only control variables (gender, commuter status, overall grade point average, age, major, class rank, and attendance status) as independent variables. In Model 2, we added self-efficacy into independent variables and in the third model, we added further social support. In all these models, depression was used as dependent variable. The results are shown in Table 3.

Table-3. Results from Hierarchical Regressions

	Model 1			Model 2			Model 3		
	B	Std. E	Beta	B	Std. E	Beta	B	Std. E	Beta
(Constant)	22.27***	5.63		42.24***	6.82		48.80***	6.66	
Race	0.10	0.59	0.01	0.15	0.55	0.02	0.10	0.53	0.01
Age	-1.04	1.47	-0.06	-0.65	1.38	-0.04	-0.53	1.31	-0.03
Gender	1.65	1.38	0.10	1.49	1.29	0.09	1.53	1.22	0.09
Class	-0.97	0.73	-0.12	-1.05	0.69	-0.13	-0.67	0.66	-0.08
Major	-0.32	0.21	-0.13	-0.09	0.21	-0.04	-0.10	0.19	-0.04
OGPA	-3.96***	1.35	-0.25	-3.03**	1.28	-0.19	-2.45**	1.23	-0.15
Status	-0.37	3.72	-0.01	2.02	3.52	0.05	1.55	3.35	0.04
Comstat	-0.13	1.68	-0.01	-0.49	1.58	-0.03	-0.69	1.50	-0.04
Self-Efficacy				-.26 ⁺	0.056	-0.36	-.18***	0.06	-0.25
Social Support							-.11 ⁺	0.03	-0.32
F	1.51			3.90 ⁺			5.61 ⁺		

R Square	0.08			0.20			0.28		
R Square Change	0.08			.12 ⁺			.08 ⁺		

Significant at the 0.05 level; *Significant at the 0.01 level; ⁺Significant at the 0.001 level.

Model 1 is not significant. Control variables only explain 8% of the variance of depression. When self-efficacy is added into the model (Model 2), the model is statistically significant and R-squared changed from 8% to 20%. The coefficient of Self-efficacy is negative and significant, which supports Hypothesis 2. When social support is added into the model (Model 3), the model is still significant and R-squared is improved to 28%. The Coefficient of Self-efficacy is still negative and significant. The coefficient of social support is also negatively and significantly, which supports Hypothesis 3. Table 3 also gives out the standardized coefficients. The standardized coefficient of self-efficacy and social support is -0.25 and -0.32, respectively. Therefore, we can make a conclusion that the influence of social support is higher than self-efficacy on depression, which is consistent with Hypothesis 4. We also check the tolerance levels in all the regressions. Collinearity was not a concern in all models (Delqui et.al, 2008).

To further analyze the first hypothesis, two regression models were run. The first was a regression analysis for self-efficacy as the dependent variable and social support as the independent variable. It was statistically significant for the model ($F(1, 153) = 18.720, p=0.000$) (As shown in Table 4). Next, a regression analysis was obtained for social support as the dependent variable and self-efficacy was the independent variable. It was statistically significant for this model as well ($F(1, 153) = 18.720, p=0.000$) (as shown in Table 5). Self-efficacy as the dependent variable and social support as the independent variable and vice-versa are explaining each other, which is consistent with Hypothesis 1.

Table-4. Regression Analysis with Self-efficacy as dependent variable and Social Support as the predictor variable (n=153).

Independent Variables	Beta	T-values	Tolerance	P-value
(Constant)		13.616		0.000
Social Support	0.152	4.327	1.000	0.000*
R-Squared	0.110			

*Significant at the 0.05 level.

Table-5. Regression Analysis with Social Support as dependent variable and Self-efficacy as the predictor variable (n=153).

Independent Variables	Beta	T-values	Tolerance	P-value
(Constant)		5.011		0.000
Self-efficacy	.723	4.327	1.000	0.000*
R-Squared	0.110			

*Significant at the 0.05 level.

The final step in the analysis was the factor analysis and the structural equation modeling for the conceptual model, for which we used SmartPLS to make the analysis. PLS is a structural equation modeling (SEM) technique and is appropriate when data cannot meet the assumptions of multivariate normality (Hair, Black, Babin, Anderson, & Tatham, 2010). Table 2 indicates that the data significantly depart from the

normality assumption (especially Depression), and thus suggest that PLS is more appropriate for our study than covariance-based SEM techniques (e.g. LISREL, AMOS).

The results are shown in Table 9 and Table 10. Self-efficacy and social support together explained 37.7% of the variance of depression. Both self-efficacy and social support are significantly negatively associated with depression. From path coefficients, social support has bigger value than self-efficacy, which proved that the influence of social support will be bigger than self-efficacy on depression. From the correlations, social support and self-efficacy is positively related with each other (0.354), which also support Hypothesis 1. In summary, the structural equation modeling results support all of the four hypotheses.

Table-6. Path Coefficients from SmartPLS

-> Depression	Original Sample	Sample Mean	Standard Deviation	Standard Error	T Statistics
Self- Efficacy	-0.313*	-0.337	0.056	0.056	5.571
Social Support	-0.429*	-0.432	0.054	0.054	7.980

*Significant at the 0.000 level.

Table-7. Latent variables correlation from SmartPLS

	Depression	Self-Efficacy	Social Support
Depression	1.000		
Self-Efficacy	-0.465	1.000	
Social Support	-0.540	0.354	1.000

Social support is a much broader concept, which included support from parents, relatives, coworkers, faculty, church, readings, TV, music and many other different sources. In addition, as stated in last paragraph, we found that social support plays a more important role to self-efficacy. Therefore, it will be interesting to find out which source(s) of social support plays the most important role. To further explore this question, we run another structural equation modeling analysis using SmartPLS. In this new model, depression and self-efficacy kept the same. We separated social support into 13 different concepts according to different sources of support, including parents support, sibling support, relative support, high school friends support, college friends support, coworker support, Church/synagogue groups support, support from individual's spiritual health, support from college faculty, counselors, administrators, support from other professionals or service providers, support from special groups that individuals belong to or any other social support. Therefore, in the new model, there are 15 constructs in total. The results are shown in Table 8.

Table-8. Path Coefficients for different sources of social support

-> Depression	Original Sample	Sample Mean	Standard Deviation	Standard Error	T Statistics
Church	-0.05	-0.05	0.07	0.07	0.74
College	-0.14*	-0.14	0.07	0.07	2.03
Coworker	-0.06	-0.07	0.05	0.05	1.29
Faculty	-0.09	-0.09	0.07	0.07	1.43
High School	-0.03	-0.04	0.06	0.06	0.66
Parents	-0.24*	-0.23	0.07	0.07	3.37
Professional	-0.23*	-0.21	0.08	0.08	3.07
Reading	0.03	0.00	0.10	0.10	0.32

Relatives	-0.06	-0.06	0.07	0.07	0.82
Siblings	-0.04	-0.04	0.05	0.05	0.74
Special	-0.21*	0.22	0.06	0.06	3.42
Spiritual Health	0.09	0.10	0.07	0.07	1.41
Other Support	0.01	0.02	0.08	0.08	0.15
Self-Efficacy	-0.37*	-0.40	0.06	0.06	6.33

*Significant at the 0.05 level.

In this new model, 41.4% of variance of depression was explained. Table 8 shows that the most important social support sources are parents support, support from other professionals or service providers, support from special groups that individuals belong to, college friends support. Also, self-efficacy still plays an important role.

Males and females could seek different support. To further compare the difference between male and female students, we separate male and female samples and run the model separately. The results are shown in Table 9. While both male and females would like to seek support from Church/synagogue groups, parents, relatives, siblings, boys also would like to seek support from college friends and professionals or service providers, girls like to seek support from other sources.

Table-9. Gender difference for sources of social support

-> Depression	Female			Male		
	Original Sample	Standard Deviation	T Statistics	Original Sample	Standard Deviation	T Statistics
Church	-0.20*	0.07	2.77	-0.17*	0.09	1.83
College	-0.05	0.06	0.83	-0.16*	0.07	2.41
Coworker	-0.07	0.05	1.51	-0.10	0.06	1.56
Faculty	0.02	0.15	0.15	-0.05	0.07	0.61
High School	-0.04	0.05	0.89	-0.01	0.06	0.09
Parents	-0.24*	0.07	3.60	-0.13*	0.07	1.77
Professional	-0.31	0.14	2.27	-0.39*	0.08	4.75
Reading	-0.14	0.19	0.74	0.10	0.09	1.17
Relatives	-0.25*	0.05	4.95	-0.21*	0.09	2.34
Siblings	-0.08*	0.04	1.89	-0.29*	0.07	4.20
Special	0.35	0.06	4.81	0.14	0.09	1.52
Spiritual Health	0.13	0.07	1.41	-0.01	0.10	0.08
Other Support	-0.03*	0.05	1.94	0.02	0.09	0.25
Self-Efficacy	-0.47*	0.06	8.48	-0.47*	0.07	6.75

*Significant at the 0.05 level.

6. DISCUSSION AND CONCLUSION

The purpose of this study was to examine self-efficacy and social support in regards to levels of depression in college students. The result of the correlation matrix indicates a significant negative relationship between self-efficacy and depression. This indicates that as a person's perceived ability to meet

challenges decrease then level of depression experienced by an individual increases. The same is true for social support and depression; they also have a significantly negative correlation. Whereas, social support and self-efficacy are positively correlated with each other, this indicates that as self-efficacy increases so does social support and vice versa. Social support has a higher correlation than self-efficacy with depression because it is believed that self-efficacy is becoming relatively stable as a person ages (Bandura, 1986) and social support is shifting from parental support to friends and institutional support. The regression analysis that was obtained confirms that these two variables are related to one another. Both regression models showed a significant relationship between self-efficacy and social support.

The significant negative correlation between overall grade point average and depression is interesting but not surprising. It is believed that depression would be the predictor of grade point average and not grade point average predicting depression levels. There is not enough information to assess this idea and it would be a good for future research. The other variables such as gender, commuter status, age, major, class rank, and attendance status were not significantly correlated with depression, self-efficacy or social support. This could be an indication that the sample was not varied enough for a significant correlation. The data for the demographic variables were much skewed. A larger cross-sectional sample may yield different results.

In addition, this paper also employed SmartPLS software to make structural equation modeling analysis. The results also proved the hypotheses. Both self-efficacy and social support would be negatively related with depression level, self-efficacy and social support are positively related with each other and the influence of social support is bigger than self-efficacy on depression. We further explored different sources of social support and found that parents, college friends and some professionals or services providers are the most important sources of social support for college students. In addition, this paper also analyzes the gender difference on social support.

These results may have implications for college students and institutions. College administrators may decide to explore ways to increase levels for social support through institutional support. They may also decide to explore implementing workshops to increase student's awareness of the need for support. This could be included in the first year studies classes. College administrators could also include socials within the residence halls to promote social interaction. These social interactions may assist students in meeting new people and forming social support within their peer group. College counselors could assist students in developing social skill necessary to form social relationships with others. Finally, college instructors can assist by identifying student that are at risk for failing grades to encourage the student to get involved in institutional groups to form social support and self-efficacy. Tutoring is a good way for student to be mentored by peers and increase self-efficacy.

Limitations and future research to this study need to be listed. The sample size is small with the sample coming from a Historically Black University. Therefore, the small sample size does not take into account cultural differences. A future study would be to examine several samples from different cultures with different ethnicities represented. The study needs to have a better representation of all classes (freshmen through graduate students), a cross-sectional or longitudinal study would be a good idea. The longitudinal study would allow the researchers to follow students to see if low self-efficacy, low social support and high levels of depression cause students to stop attending. Whereas, looking at a cross-sectional study would negate the idea that low levels of self-efficacy and lack of social support will cause a reduction in retention rates with college students. Gender may be significant predictor if a sample with more males were obtained for further study. Lastly, a measure of the students other responsibilities would be helpful to understand if stress is a dedicating factor in self-efficacy and social support on levels of depression.

Although this study has a limited scope and is not a representation of all college students. It does give a strong indication of the need for further research into self-efficacy and social support on levels for

depression for college students. This is very important to institutions that are trying to retain students from year to year. This study is also important to students that are trying to navigate the challenges of college life with a lack of social support and higher levels of depression, while trying to balance college, family, and possibly a job.

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