

# Stress, Anxiety, Depression And Psychological Responses Among African Americans: Empirical Investigation And Coping Strategies

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## ABSTRACT

*This study examined the impact of stress by exploring the relationship between coping strategies and psychological responses such as stress, anxiety and depression among African American women in the academic setting. Research suggests African American women's coping strategies have an impact on their academic performance. Findings in this study were consistent with previous research that supports a complex coping strategy. Examination of emotion-oriented, task-oriented, and avoidance coping strategies provided insight into the various coping strategies. Avoidance coping strategies were further divided into social diversion and distraction. African-American women who reportedly experienced high levels of stress and low levels of anxiety and depression used a combination of coping strategies. Emotional-oriented coping was found positively correlated with anxiety and depression. Task-oriented and avoidance coping were also correlated with lower levels of anxiety and depression.*

**Keywords:** Stress, Coping Strategies, Anxiety, Depression

## INTRODUCTION

According to the 2009 National Science Foundation Report, women are over-represented in the professional fields of the social sciences (NSF, 2009). However, African American women remain minorities in the academic and professional domains of social sciences. Studies have often compared the coping strategies of African American women to that of white men, women, and African-American men (Ellis, 2001, Gasman, et al., 2008). These comparisons indicated African American women experience higher levels of stress, anxiety, and depression. However, few have focused specifically on African-American women and their coping strategies (Gasman, et al., 2008, Heads, 2009).

Research has been conducted on stress, anxiety and depression and their impact on individual's perception of their academic experience (Gasman, et al., 2008, Heads, 2009; Uqdah, Tyler, DeLoach, 2009). Many studies have been conducted to investigate the relationship between psychological responses and their impact on coping strategies (Ellis, 2001, Uqdah, et al., 2009). African-American women's coping strategies have not been examined frequently (Ellis, 2001). Academic settings are attended and operated by diverse students and administration for a variety of reasons. Individuals in these settings are often required to adhere to multiple deadlines on multiple projects (Cahir & Morris, 1991). Individuals are confronted with demands, conflicts, and adjustments to novel environments and social interactions. These concerns may cause individuals to experience stress. Stress may yield a variety of responses such as anxiety and depression (Cohen, 1994). Coping strategies influence the extent to which these responses cause distress and effects their functioning and decision-making. This study will focus on coping strategies and perceived levels of stress, anxiety, and depression to aversive situations. Aversive situations include job demands, homework, and projects (Cahir & Morris, 1998).

Stress, anxiety, and depression are psychological responses individuals experience as a result of their coping strategies. African American women experience these psychological responses to an extent determined by their coping strategies (Ellis, 2001, Gasman, Hirschfield, Vultaggio, 2008). The relationship between psychological responses and coping strategies will facilitate understanding of the cognition of African-American women (Ellis, 2001). This study primarily will focus on the experience of African-American women in academic settings to examine the relationship between coping strategies and their perception of their psychological responses.

Stress is a psychological response to aversive stimuli that occur in the academic setting that affects individuals internally and externally. Individual's stressors impact their psychological well-being (APA, 2006). Stress is related to the student experiencing symptoms characteristic of anxiety or depression. Major academic stressors reported for students were time demands, teaching methods, adjustments and classroom performance and environment. (Cahir et al., 1998, Ducheny, Alletzhauer, Crandell, Schneider, 1997). Faculty members also have a unique set of stressors as they balance research, teaching, and advisement. Personal stressors that affect a person's performance are conflicts in their interpersonal relationships and financial situation (Cahir, et al., 1998). Adjustments to academic responsibilities also occur in daily social interactions between students, faculty, and administration. Faculty and students' performance is impacted by their ability to cope with disappointment (Matheny, et al., 2003; Solem, Lee, Schlemper, 2009).

Anxiety is also a psychological response to aversive situations. Anxiety is a mood characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune (APA, 2006). The future threat may be real or imagined, internal or external. It may be an identifiable situation or a more vague fear of the unknown. For example, women may feel threatened or ostracized in the academic environment (Solem, Lee, Schlemper, 2009). The majority employed in the academic profession are older white males (Ellis, 2001, NSF, 2009). Students may fear failure or incompleteness of their studies; whereas, faculty may feel rejected by their peers (Solem, et al., 2009). Anxiety provoking problems for students include time constraints, financial constraints, trouble getting help from faculty, and limited emotional support from friends.

Depression is not only a psychological response to aversive situations but is also a psychological disorder characterized by a dysphoric mood (APA, 2006). The symptomatology is listed in the DSM-IV-TR. Dysphoria is a mood that varies in severity from a fluctuation in normal mood to an extreme feeling of sadness, pessimism, and dependency. Dysphoria is also a category of Major Depressive Disorders characterized by sadness, discontent and sometimes restlessness (APA, 2006). Individuals may experience depression as they experience difficulty with specific feedback from faculty regarding status; and stress from lack of input in program decisions (Dearing, Maddux, Tangen, 2005, Solem, et al., 2009). Students particularly catastrophize lack of input or constructive criticism. Faculty may not be fully involved in program decisions and activities (i.e., performance evaluations) that affect their progress (Dearing, Maddux, Tangen, 2005).

Anxiety and depression may be indicative of poor coping resources and elevated levels of stress (Hays, Sherbourne, Mazel, 1995). Females had significantly higher stress scores than males in one study investigating stress (Dearing, et al., 2005, Hays, et al., 1995). Some stress may be beneficial to students by increasing their motivation and productivity. However, stress may cause a negative impact by having an adverse reaction. Stress, anxiety and depression may result in physiological responses to stress. Physiological responses are caused by stress and manifest in poor health where the person is more susceptible to infection as a result of a weakened immune system (Hays, Sherbourne, Mazel, 1995).

People strive to retain, protect, and build coping resources as they experience threats that result in perceived potential loss of resources (Matheny, Aycok, Curlette, Junker, 2003). Coping involves cognitive and behavioral strategies that individual's rely to address the demands of a situation caused by stress and to manage aversive situations (APA, 2006). Coping strategies are employed when the demands of a situation are perceived as taxing, exceeding one's resources to reduce the negative emotions and conflict caused by stress (APA, 2006; Matheny, et al., 2003).

Research suggests coping mediates the effects of anxiety and depression. Coping responses (i.e., stress, anxiety, and depression) are behaviors that occur after stressors have been engaged (Matheny, et al., 2003, Endler & Parker, 1999). Coping strategies are in place before aversive situations occur (Matheny, et al., 2003). Stress involves

changes affecting nearly every system of the body, influencing how people feel and respond (Hays, et al., 1995). The individual's ability to be aware and seek assistance when their stress level becomes elevated is a valuable coping strategy. Due to varying coping strategies and contexts of aversive situations, women are more susceptible to experiencing an emotional response. Resiliency to stress is when coping strategies prevent feelings of anxiety and depression. Resiliency is strongly correlated with completion of student's programs, acceptance by their peers, and their perception of performance (Athanasiaides, 2008, Cahir, et al., 1991.). Additionally, women may suppress feelings of anxiety or depression which can serve as a correlation with stress for this population.

Coping strategies refer to stress management techniques that involve a number of responses or actions. These psychological responses then impact academic functioning and decision making (Chair, et al., 1991). Coping strategies have correlations with perceived level of stress, anxiety, and depression (Heads, 2009; Uqdah, et al., 2009). Endler & Parker (1990) developed the coping inventory for stressful situations and identified three coping strategies, emotion-oriented, task-oriented, and avoidance-oriented coping. According to their research, women tend to utilize emotion-oriented coping strategies more frequently than men. Individuals with an emotion oriented coping style are more likely to experience elevated levels of anxiety and depression (Cahir, et al., 1991; Uqdah, et al., 2009). Task-oriented coping strategies and avoidance coping strategies have been related to lower levels of perceived stress, anxiety and depression. Avoidance coping strategies were divided into subgroups- social diversion and distraction. Based on the purposes and frequency of use, avoidance coping strategies have been positively correlated with anxiety and depression (Endler & Parker, 1999; Uqdah, et al., 2009). Persons with an avoidance style will exhibit similar symptoms but may also feel rejected by their peers or authority figures.

In the current research, we compared coping strategies (task-oriented, emotion-oriented, and avoidance-oriented) of African American women in the academic setting with psychological responses (stress, anxiety, and depression). African American women face challenges that out them under extraordinary stress (Ellis, 2001; Uqdah, et al., 2009). African American women may experience anxiety and depression as a result of stress (Uqdah, et al., 2009). The source of this stress may be a result of cultural differences between those in authority and the students. Students and faculty may both feel as though they are isolated. They may or may not have a support system on which they can rely.

African-Americans perception of stress allowed us to examine coping strategies and their psychological responses. Comparison of the CISS and the MHI allowed us to determine if there is a relationship between the different coping strategies and psychological responses (Endler & Parker, 1990). High levels of stress were held constant. Anxiety and depression were dependent variables and the independent variables were emotional-oriented coping, task-oriented coping, and avoidance-coping by directly observing distraction and social diversion. Hypothetically, women who experience high levels of coping strategies will rely primarily on one coping strategy, especially emotion-oriented and distraction-avoidance coping. Social distraction and task-oriented coping will yield lower levels of anxiety and depression.

## **METHODS**

Data was collected previously by Angela Bowman Heads' study on perfection. She gave permission for her data and variables that were not included in her original study to be analyzed for this study. Participants were 122 African American women who were recruited via email and listservs of various university organizations and directly in university classrooms. Participants' ages ranged from 19 to 59 years ( $M=29.02$ ,  $SD=10.52$ ). Although the target sample was originally university students, due to the small sample size nonstudents ( $n=22$ ) were included in the analysis. Approximately 82% of the participants were enrolled in a college or university at the time the survey was completed (52.5% were undergraduates, 29.5% current graduate students, 18.0% were non students).

The following demographic information was collected. Age, gender, racial/ethnic background, year in academic program, area of concentration and place of origin data were collected. Perceived Stress Scale is a self-report that measures individual's perception of life stress within the past month (Cohen, Kamarck, Mermelstein, 1983). The PSS is a 14-item scale that measures the degree of self-perceived stress. Participants were asked to respond based on their degree of experienced stress within the past month on a 5-point Likert scale ranging from 0 (never)-4 (very often). Cohen et al.(1983) report 8 week test-retest reliability of .76. Alpha for this study was

( $\alpha=.87$ ). The Coping Inventory for Stressful Situations is an inventory that is used to measure coping styles (Endler & Parker, 1990). The CISS is a 48-item questionnaire that examines coping style along three dimensions and their reliabilities Task-Oriented ( $\alpha=0.93$ ), Emotion-Oriented ( $\alpha=0.896$ ), and Avoidance Coping ( $\alpha=0.876$ ) strategies. Endler and Parker (1990) report 6-week test-retest reliability of 0.71 on the Emotion subscale, 0.72 on the Task subscale, and 0.60 on the avoidance subscale for females.

Scales of the Mental Health Inventory (MHI, MOS, 1995) include psychological distress which includes measures of anxiety and depression. The MHI is a self-report that assesses individual's psychological well-being and cognitive functioning assist in the determination of mental health concerns. The Mental Health Index (MHI) is comprised of two scales the Mental Health Index I and Mental Health Index II. They have similar scales of psychological distress depression/behavioral emotional control and anxiety. The 22-item psychological Distress scale I has reliabilities of ( $\alpha=0.98$ ,  $M=7.27$ ,  $SD=19.6$ ). The subscales are the depression/behavioral emotional control I (13-item,  $\alpha=0.96$ ,  $M=79.0$ ,  $SD=19.7$ ) and the anxiety I (6-item,  $\alpha=0.93$ ,  $M=74.6$ ,  $SD=20.0$ ). The 17-item psychological distress scale has a reliability of ( $\alpha=0.97$ ,  $M=77.3$ ,  $SD=19.6$ ). The subscales are the depression/behavioral emotional control II (8-item,  $\alpha=0.95$ ,  $M=77.3$ ,  $SD=21.0$ ) and the anxiety II (3-item,  $\alpha=0.86$ ,  $M=73.1$ ,  $SD=22.1$ ).

Data was collected previously by Angela Bowman Heads' study on perfection. She gave permission for her data and variables that were not included in her original study to be analyzed for this study. Participants were 122 African American women who were recruited via email and listservs of various university organizations and directly in university classrooms.

Multiple regression analyses provided the primary tests of our hypotheses. The analyses tested stress, anxiety, and depression across coping strategies. Due to the nature of the instruments used, data analysis utilized depression to measure depression. Anxiety is coded as anxiety. However, II Anxiety and II Depression are reflective of the MHI-II; whereas Anxiety and Depression are scores from the MHI-I. Once low levels of stress were controlled, there appeared to be no statistical differences between Anxiety-II Anxiety and Depression-II Depression. Coping strategies were coded based on their orientation (i.e., emotion-oriented coping, etc). COPEEMO is coded for emotion-oriented coping. COPETASK is coded for task-oriented coping strategies. Avoidance coping (COPEAVOID) was subdivided into COPESD (social diversion) and COPEDISTR (distraction).

## RESULTS

The sample consisted of 183 participants only 81 were completed surveys of college students, which comprised 66.7% of those sampled. Of those sampled, 65 (>33%) were experiencing high stress. All participants were African-American women who were enrolled in college or universities throughout the southern United States. Their average age was 30.09 years old ( $sd=10.43$ ). Average GPA was 3.35 with an attendance mean of 4.37 years ( $sd=1.23$ ) in college.

**Table 1: Demographic Characteristics**

	Mean	Std. Deviation
Age	30.09	10.43
Sex	1.98	0.16
College Status	4.37	1.23
GPA	3.35	0.5

Stress, anxiety and depression were found to have strong relationships. Stress and anxiety yielded a moderate relationship. This indicates that as stress increases anxiety does also. Stress also yields a negative but moderate relationship with depression (Table 3). Anxious and depressive psychological responses have a moderate relationship to an individual's perceived level of stress is consistent with previous studies (Cohen, et al., 1994, Endler, et al., 1999, Hays, et al., 1995).

**Table 2: Descriptive Statistics**

	Mean	Std. Deviation
Anxiety	426.39	115.77
Depression	995.78	253.2
Stress	22.13	8.88

**Table 3: Correlations of Psychological Responses**

	Anxiety	Depression	Stress
Anxiety		0.751	-0.661
Depression			-0.648
Stress			

The first set of predictors, emotion-oriented coping and task-oriented coping accounted for a significant amount of the depression variability,  $R^2=0.24$ ,  $F(2)=0.966$ ,  $p<.05$ . When distraction is included, depression variability is  $R^2=.24$ ,  $F(62)=9.66$ ,  $p<.05$ . Depression has a moderate relationship that is significant. This supports previous findings that the emotion-oriented and task-oriented coping strategies are likely to coexist with an individual who is also exhibiting depression. These findings are reported in Table 4 and 2-1.

**Table 4: Descriptive Statistics for Depression**

	Mean	Std. Deviation
Depression	869.23	277.92
COPETASK	57.82	10.90
COPEEMO	48.04	10.73
COPEDISTR	26.92	5.70
COPESD	17.76	4.46

Although the relationships were significant for depression and coping strategies, combinations of task-oriented coping, emotion-oriented coping, distraction and social diversion yielded moderate relationships. The coping strategies reported increased the strength of the relationship. This is consistent with previous results finding that there may be aspects of these coping strategies that may healthy and reduce their level of depression. Moderate relationships were found between depression and emotion-oriented coping. When avoidance coping strategies were incorporated the relationship, increased but were no longer significant.

Stress was held constant during and was defined as high-low stress (1=low stress, 2=high stress). Depression and anxiety on the MHI-I and MHI-II were studied independently. Individuals who experienced a high level of stress had a mean depression score of 869.23. Pearson correlations yielded weak relationships between depression and avoidance coping strategies. This suggests that individuals who engage in social diversion or distraction experience fewer depressive symptoms. Task-oriented coping strategies yielded a positive moderate relationship. This indicates that as stress increases, depression also increases. These persons are able to engage in different activities that do not decrease depressive feelings. Emotion-oriented coping strategies are also moderately related to depressive feelings. As depression is a psychological response that impacts a person's emotional well-being, individuals who utilize emotion-oriented coping strategies may experience psychological distress. Table 5 shows the correlations between depression and coping strategies.

**Table 5: Pearson Correlations between Depression and Coping Strategies**

	Depression	COPETASK	COPEEMO	COPEAVD	COPEDISTR	COPESD
<b>Depression</b>		.417	-.599	.108	-.031	.186
<b>COPETASK</b>			-.287	.296	.094	.388
<b>COPEEMO</b>				-.022	.051	-.035
<b>COPEAVD</b>					.889	.844
<b>COPEDISTR</b>						.544

Step-wise regression analyses were conducted to also determine the significance of these relationships. Regression analyses yielded weak to moderate relationships that were significant based on the t-test. This analyses demonstrates that more coping strategies reported, the fewer depressive feelings that are perceived. These results support our hypotheses that there is a relationship between depression and coping strategies. These results also support that a variety of coping strategies predicts a lower perceived level of depressive feelings.

**Table 6: Stepwise Regression between Depression and Coping Strategies**

		B	Std. Error	Beta	t	Sig.
1	(Constant)	752.646	243.236		3.094	.003
	COPETASK	8.382	2.895	.329	2.895	.005
	COPEEMOTION	-7.661	2.942	-.296	-2.604	.012
2	(Constant)	708.541	288.801		2.453	.017
	COPETASK	8.171	3.007	.321	2.717	.009
	COPEEMOTION	-7.439	3.061	-.287	-2.430	.018
	COPEDISTR	1.697	5.881	.035	.289	.774
3	(Constant)	730.621	289.911		2.520	.014
	COPETASK	6.623	3.415	.260	1.939	.057
	COPEEMOTION	-7.526	3.065	-.291	-2.456	.017
	COPEDISTR	-1.848	6.951	-.038	-.266	.791
	COPESD	9.404	9.813	.151	.958	.342

Anxiety accounted for a significant amount of the variability between coping strategies. According to the MHI-I, anxiety has a mean of 366.15,  $sd=115.104$ . The variability of emotion-oriented coping and task-oriented coping,  $R^2=0.25$ ,  $F(2)=10.355$ ,  $p<.05$ . When distraction is included variability becomes  $R^2=.251$ ,  $F(3)=6.813$ ,  $p<.05$ . Both avoidance coping strategies yield a variability of  $R^2=.273$ ,  $F(4)=5.622$ ,  $p<.05$ . These results suggest anxiety has a weak but significant relationship with emotion-oriented and task-oriented coping strategies.

**Table 7: Anxiety and Coping Strategies Mean and Standard Deviation**

	Mean	Std. Deviation
<b>Anxiety</b>	366.15	115.104
<b>COPETASK</b>	57.82	10.903
<b>COPEEMOTION</b>	48.04	10.730
<b>COPEDISTR</b>	26.92	5.700
<b>COPESD</b>	17.76	4.463

Selecting only cases for which high Low Stress = 2.00



Pearson correlations (Table 8) yielded weak relationships for anxiety, task-oriented coping, and avoidance coping strategies. However, anxiety yielded a weak positive relationship with social diversion and a weak negative relationship with distraction. This suggests that although the relationship is weak, anxiety increases as social perception is a factor. Additionally a moderate negative relationship was found between anxiety and emotion-oriented coping. This, too, is consistent with previous results finding that aspects of these coping strategies that reduce their level of anxiety. Therefore, individuals who utilize emotion-oriented coping tend to experience higher levels of anxiety. Therefore, emotion-oriented coping does not alleviate anxiety but is a predictor that individuals are likely to become anxious in aversive situations.

**Table 8: Pearson Correlations between Anxiety and Coping Strategies**

	Anxiety	COPETASK	COPEEMO	COPEAVD	COPEDISTR	COPESD
Anxiety		.275	-.656	.029	-.084	.095
COPETASK			-.287	.296	.094	.388
COPEEMO				-.022	.051	-.035
COPEAVD					.889	.844
COPEDISTR						.544

\*\* Correlation is significant at the 0.01 level (2-tailed).

Again, Stepwise Regression analyses were conducted to examine the relationship between anxiety and coping strategies. Anxiety yielded a significant relationship amongst all coping strategies. These regression statistics demonstrate that for persons with a high level of stress it is more beneficial to use a variety of coping strategies. However, for individuals who rely primarily on emotion-oriented or task-oriented coping strategies they are more likely to report higher levels of anxious feelings. These feelings can be reduced when an avoidance coping strategy is implemented.

**Table 9: Stepwise Regression Coefficients for Anxiety and Coping Strategies**

		B	Std. Error	Beta	t	Sig
1	(Constant)	523.419	99.897		5.240	.000
	COPETASK	1.352	1.189	.128	1.137	.260
	COPEEMOTION	-4.901	1.208	-.457	-4.056	.000
2	(Constant)	509.913	118.646		4.298	.000
	COPETASK	1.287	1.235	.122	1.042	.301
	COPEEMOTION	-4.833	1.258	-.450	-3.843	.000
	COPEDISTR	.520	2.416	.026	.215	.830
3	(Constant)	522.474	118.263		4.418	.000
	COPETASK	.407	1.393	.039	.292	.771
	COPEEMOTION	-4.882	1.250	-.455	-3.905	.000
	COPEDISTR	-1.497	2.836	-.074	-.528	.600
	COPESD	5.350	4.003	.207	1.337	.186

Mental Health Index II. The MHI-II includes a second set of predictors for anxiety and depression. Depression on the MHI-II has a mean of 66.86 ( $sd = 21.378$ ). Depression was also compared with emotion-oriented, task-oriented, and avoidance coping strategies. Analysis accounted for a significant amount of the depression variability,  $R^2=0.238$ ,  $F(2)=9.666$ ,  $p<.05$ . When distraction is included, depression variability is  $R^2=.239$ ,  $F(3)=6.376$ ,  $p<.05$ . When both avoidance strategies are included, the variability is  $R^2=.239$ ,  $F(4)=5.006$ ,  $p<.05$  between all coping strategies. These results suggest a weak relationship between all coping strategies. Again, task-oriented and emotion-oriented coping strategies yielded a significant but weak relationship.

**Table 10: MHI-II Depression Mean and Standard Deviation**

	Mean	Std. Deviation
II Depression	66.86	21.378
COPETASK	57.82	10.903
COPEEMOTION	48.04	10.730
COPEDISTR	26.92	5.700
COPESD	17.76	4.463

Pearson correlations yielded weak relationships between depression and coping strategies. This suggests that coping strategies are not related to feelings of depression that result in a change in the individual's psychological well-being. Results further indicated that the relationship between task-oriented coping and social diversion coping yields a moderate relationship. This provides supportive evidence for a combination of coping strategies to prevent a negative impact on the psychological well-being. Additionally, results further indicate that coping strategies are intervention strategies that help the person to experience fewer depressive feelings.

**Table 11: Pearson Correlations for Depression and Coping Strategies**

	II Depress	COPETASK	COPEEMO	COPEDISTR	COPESD
II Depress		.393	-.367	-.213	.329
COPETASK			-.216	.291	.538
COPEEMO				-.297	-.208
COPEDISTR					.592

\*\* Correlation is significant at the 0.01 level (2-tailed).

Anxiety on the MHI-II has similar correlations with coping strategies as MHI-I Anxiety. Anxiety accounted for a significant amount of the variability between coping strategies. According to the MHI-II, anxiety has a mean of 71.07,  $sd = 19.3$ . The variability of emotion-oriented coping and task-oriented coping,  $R^2 = 0.25$ ,  $F(2) = 10.355$ ,  $p < .05$ . When distraction is included variability becomes  $R^2 = .251$ ,  $F(3) = 6.813$ ,  $p < .05$ . Both avoidance coping strategies yield a variability of  $R^2 = .273$ ,  $F(4) = 5.622$ ,  $p < .05$ . These results suggest anxiety has a weak but significant relationship with emotion-oriented and task-oriented coping strategies.

**Table 12: MHI-II Anxiety and CISS Coping Strategies Mean and Standard Deviations**

	Mean	Std. Deviation
II Anxiety	71.07	19.296
COPETASK	60.81	10.872
COPEEMOTION	40.61	12.066
COPEAVOID	52.47	11.811
COPEDISTR	25.79	6.521
COPESD	17.78	4.688

Pearson correlations (Table 8) yielded weak relationships for anxiety, task-oriented coping, and avoidance coping strategies. However, anxiety yielded a weak positive relationship with social diversion and a weak negative relationship with distraction. This suggests that although the relationship is weak, anxiety increases as social perception is a factor. Additionally a moderate negative relationship was found between anxiety and emotion-oriented coping. This, too, is consistent with previous results finding that aspects of these coping strategies that reduce their level of anxiety. Therefore, individuals who utilize emotion-oriented coping tend to experience higher levels of anxiety. Therefore, emotion-oriented coping does not alleviate anxiety but is a predictor that individuals are likely to become anxious in aversive situations.

**Table 13: Pearson Correlations for MHI-II Anxiety and Coping Strategies**

	II Anxiety	COPETASK	COPEEMO	COPEAVD	COPEDISTR	COPESD
II Anxiety		.275	-.656	.029	-.084	.095
COPETASK			-.287	.296	.094	.388
COPEEMO				-.022	.051	-.035
COPEAVD					.889	.844
COPEDISTR						.544

\*\*Correlation is significant at the 0.01 level (2-tailed).

**Table 14: Coefficients for MHI-II Anxiety and CISS Coping Strategies**

	B	Std. Error	Beta	t	Sig.
(Constant)	106.116	10.973		9.671	.000
COPETASK	.085	.144	.048	.590	.556
COPEEMOTION	-.992	.116	-.620	-8.514	.000
COPEAVOID	.548	.736	.336	.745	.458
COPEDISTR	-.970	.861	-.328	-1.127	.262
COPESD	-.206	.980	-.050	-.211	.834



Stepwise Regression analyses were conducted to examine the relationship between anxiety and coping strategies. Anxiety yielded a significant relationship amongst all coping strategies. These regression statistics demonstrate that for persons with a high level of stress it is more beneficial to use a variety of coping strategies. However, for individuals who rely primarily on emotion-oriented or task-oriented coping strategies they are more likely to report higher levels of anxious feelings. These feelings can be reduced when an avoidance coping strategy is implemented.

## DISCUSSION

Students experience high levels of stress. Coping strategies are important in determining the psychological impact stress will have on individual. Individuals who are perceived as having poor coping strategies are most likely to be extrinsically motivated and report more symptoms of depression and anxiety. Research also suggests they are least likely to complete tasks, assignments or attain goals as they may vary. Individuals typically utilize a combination of coping strategies. This study's findings were consistent with previous studies that support correlations between coping strategies and psychological responses. Individuals who reported high levels of stress but low levels of anxiety and depression utilized a variety of coping strategies. Individuals who incorporate one or two strategies were more likely to experience anxiety and depression. This study only focused on individuals who exhibited high levels of stress. Additional follow-up should be conducted to determine the coping strategies of individuals who perceive their level of stress as low. Additionally, it would have been important to determine if individuals experienced co-existing symptoms of depression and anxiety. A co-morbid existence of symptoms may also have an impact on the type of coping strategies are utilized.

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