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Utilization of COPE in the College Population

Submitted in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice  
at Eastern Kentucky University

By

Rachael Hovermale

Richmond, Kentucky

2013

### **Abstract**

**Background:** College is a major transition in the lives of many young adults. As early as 1997, Sax reported that stress and depression were on the rise among college students and that 9.7% of college freshmen experienced depressive symptoms. Mental health treatments are often geared to children or older adults. **Objective:** The objectives of this project were to (a) assess levels of anxiety and depression in identified at risk college students; (b) implement a new cognitive behavioral therapy (CBT)-based intervention; and (c) evaluate the effectiveness of the intervention on students' levels of anxiety and depression and satisfaction with the intervention.

**Design:** A one group pre and posttest was used. **Results:** The COPE project demonstrated improvement in depressive and anxiety symptoms in 100% of the project population as measured by the Beck Depression Inventory II and the State -Trait Anxiety Inventory. There were both statistical and clinical significance shown at the conclusion of the seven sessions. **Conclusion:** COPE is an effective tool for the young adult population to decrease symptoms of depression and anxiety. Implementation of evidenced based programs into the college experience could lead to less severe depression and anxiety.

**Keywords:** evidenced-based practice, college transition; young adult; depression; anxiety; mental health symptoms; college attrition rates; barriers to care; Creating Opportunity for Personal Empowerment intervention; and CBT

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## Utilization of COPE in College Population

### **Background and Significance**

College is a major transition in the lives of many young adults. This is often the first time young adults are without parental figures nearby, thus offering the students increased independence and responsibility. This independence and responsibility can potentially be stressful and challenging to the student and family. Geller & Greenberg (2010) found that college success is often equated with the young adult achieving an independent social and professional life outside the family of origin. This success or failure is often regarded as a reflection of the young adult's functioning, as well as parental success in raising them. The pressure and freedom that is found in the college setting can often lead to many co-morbid issues such as depression, anxiety, and substance abuse. Not only can being in the college setting affect mental health, this is often the physiological age in which mental health and substance abuse disorders manifest despite environmental surroundings (DSM IV-TR, 2000).

Newman, Silva, & Stanton (1996) reported that despite the prevalence of mental health issues and substance abuse in the young adult population, utilization of mental health services is often low. Young adults (ages 18-24) are less likely to seek treatment than older adults (ages 35-54) (Biji & Ravelli, 2000). There are several explanations for this underutilization of services based on a review of current literature. First, young adults are generally healthy and do not see health care providers regularly (Patel, Flisher, Hetrick, & McGorry, 2007); second, parental influence and responsibility are diminished during this transitional phase and the decision regarding treatment falls to the young adult (Logan & King, 2001); third, young adults lack knowledge about mental health symptoms and are often unable to recognize the symptoms in themselves (Rickwood, Deane, Wilson, & Ciarrochi, 2005); and lastly, most mental health

treatment has been designed for either children or older adults (Davis, 2003). Vanheusden, et al. (2008) also purported that young adults seek services less often than older adults because of the stigma associated with mental health issues. Treatment should be tailored to the specific needs of this population with a particular style that engages and promotes healthy choices (Vanheusden, Mulder, van der Ende, van Lenthe, Mackenbach, and Verhulst, 2008).

Young adults have the desire to solve things independently, but often have limited knowledge and experience to be highly effective. As early as 1997 Sax reported that stress and depression were on the rise among college students, and that 9.7% of college freshmen experienced depressive symptoms. According to the 1995 National College Health Risk Survey, 10.3% reported serious suicidal thoughts, 6.7% had made plans for suicide, and 1.5% had attempted suicide (National College Health Risk Survey, 1997). There is the need to find acceptable and effective mental health treatments, delivered in a minimal time period.

When examining reasons for college attrition rates Sydow & Sandel (1998) reported “32% of students surveyed cited personal or family illness for withdrawal from classes and 24% of respondents attributed their withdrawal to personal or family conflicts” (p 636). Students are more likely to drop out of postsecondary education during the first year more than any other year (Willcoxson, 2010). The National Center for Higher Education Management System (2012) reported that in 2010 college attrition rate after the freshmen year, depending on the state, was between 20-40%. Average attrition for the United States as a whole was 22.9% and for Kentucky was 27.3-36.7%. Berea College, where this evidence-based intervention was implemented, had an attrition rate of 22% (Berea College Statistical Report, 2011-2012).

There are negative implications for leaving college without obtaining a degree. Every student that leaves before their degree completion costs the college or university thousands of



dollars in lost tuition, fees, and alumni contributions. The decision to leave college is frequently economically detrimental to the college dropout, whose decision to leave often leads to earning much less over a lifetime of work (National Center for Educational Statistics, 1989). Financial concerns can also increase the risk of depression and anxiety, and are intensified if effective coping techniques are not developed. If depressive and anxiety symptoms are left untreated they will persist and possibly exacerbate into significant post-depression dysfunction (increased risk of suicide) and comorbid disorders such as substance use and other mental health disorders (Yu et al. 2008). If mental health interventions can be implemented that help to increase retention rates either within institutions or through transfer to outside services, the likelihood of students persevering to graduation is far greater.

Appropriate interventions could have a positive effect on college attrition rates and increase the likelihood of the completion of a college degree (Sydow & Sandel, 1998). Cognitive behavior interventions can lead to a decrease in depression and anxiety in the college-age population (Peden et al. 2001). Brief CBT has shown to be highly effective in improving symptoms not only in the acute stages but also in preventing the development of worsening mental health symptoms (Peden et al., 2001). By implementing brief CBT, college attrition rates will likely be decreased and an increase in completion of degrees achieved. Learning to control mental health symptoms effectively; could potentially save the individual thousands of dollars in acute treatment and lost wages from exacerbation of symptoms, while improving self-esteem and ability to manage stressors that arise in life.

The purposes of this project were to (a) assess levels of anxiety and depression in identified at risk college students; (b) implement a new CBT-based intervention; and (c) evaluate the

effectiveness of the intervention on students' levels of anxiety and depression and satisfaction with the intervention.

### **Theoretical Framework**

Meleis' (2010) Transitions Theory focuses on nurses and students collaborating "during a time of change or transition that does or could affect their health, well-being, and ability to care for themselves" (p.11). Knowledge of this framework can be applied to the college-aged population and their mental well-being through the process of brief CBT utilizing the COPE intervention. To understand the evolution into young adulthood one needs to understand the transitional process. Adolescence and young adulthood have long been recognized as a major transition time for young people. Geller & Greensburg (2010) report that when conceptualized, this phase of life is usually thought of as a time in which the person increases affiliation with peers and eventually establishes a work and personal life outside of their family of origin. Life transitions, such as moving away to college create valuable opportunities for growth and change. However, these changes have the potential for development of personal and emotion problems, global psychological distress, somatic distress, anxiety, low self-esteem, and depression (Gerdes & Mallinchrout, 1994). Meleis reports that in a world full of constant change and new medical discoveries, human beings are experiencing transitions that could or could not lead to an ability to cope with these changes. Meleis suggests that additional research is needed that focuses on the way people experience, respond, and how transition impacts the physical and mental health of the individual. Research is needed to investigate the strategies that are applied to achieve those healthy transitions. Chick & Meleis (1986) began assessing the transition theory by conducting a concept analysis which defined transitions as a "passage or movement from one state, condition, or place to another" (Schumacher & Meleis, 1994, p. 119).

Shumacher & Melies (1994) reported that despite the diversity of transitions there are commonalities that may be considered properties of the transition experience. The first commonality is awareness. **Awareness** is associated with how well and what is known about the transitions in relation to what is expected of those undergoing such a transition (Shumacher & Melies, 1994). Often young adults are not aware of mental health symptoms or have the belief that things will just get better.

Vanheusden et al. (2008) reported young people with severe mental health issues do not recognize that a problem exists and those that did not seek help believed that the problem was not serious or would go away. Wilson et al. (2000) reported that the stigmatization of mental illness may develop through media sources and television programs. The World Health Report (2003) reported that integrating both preventative and promotional programs for mental health could be a positive strategy to decrease the stigma and increase public awareness for those suffering from mental illness.

The second commonality, **engagement**, explains how involved the individual is in the processes that occur as part of the transition. Sydow & Sandel (1998) reported 32% of the students enrolled in a Virginia College, cited personal or family illness as the basis of withdrawal from courses. Sydow & Sandel (1998) also reported possible retention techniques could include “teaching a quality course; providing out-of class assistance; making the course relevant to life; making accommodations and exceptions when warranted; administering more tests and quizzes to provide ongoing feedback about student progress; and making the classroom student centered” (p. 5). Tailoring treatment to the specific needs and issues of the individual as well as interactive therapy will also increase participation and completion of the program.

The third commonality, **change and difference in thought pattern**, is the understanding of how change affects the transition in their lives. Prancer et al. (2004) reported that 60% of high school graduates seek to obtain college degrees and that this transition represents a major change in most facets of the individual's life. Students' networks of support established in their earlier life are left behind and they no longer have parental control that was previously imposed (Prancer et al., 2004). This new found freedom of choice and behaviors requires individual responsibility previously shared with adults in their lives. Education on transitioning successfully to the college social setting is at times challenging. Programs that highlight and prepare students to address these challenges are imperative. Interventions that include CBT have been shown to improve coping skills and healthy choices (Peden et al., 2001).

The fourth commonality, **time span**, is the flow and movement over time. CBT has been shown to assist with life stressors and improving mental health symptoms. Peden et al. (2001) demonstrated that 18 months after intervention participants continued to demonstrate a decrease in negative thinking and improvement in managing mood symptoms. Intervention's based on CBT help to adapt and change negative thinking and improve depressive and anxiety symptoms. The skills learned during the intervention can assist the individual through other transitions in life.

The final commonality, **critical event/turning point**, is the transition to college and the freedom and responsibility that comes along with this transition. Prancer et al. (2004) reported that if the students believe that their resources are sufficient for managing stressors, they find the stress manageable and will likely adjust to college life. If skills can be learned early in this transition, the foundation is set for continued success not only in academia but in healthy

lifestyle choices and a decrease in depressive and anxiety symptoms that could if left untreated lead to lifelong struggles.

Interventions that target these transitional commonalities within the student population can assist with making the college adjustment more successful. There is strong evidence supporting CBT as an effective treatment for adolescents/young adults that are depressed (Peden et al., 2001). CBT is based on the premise that the individual has developed distorted patterns of thinking and react to preserve these distortions (Melnyk, 2003). The CBT concept is to change the thought process in regards to triggers/situations, the individual then can change the way they feel, consequently changing the way they behave. When the individual understands the concept of CBT and why it is effective the likelihood of follow through is higher. Incorporation of skill building with applicable daily life coping strategies is built into therapy sessions. The knowledge that change is possible and that thought can be productive provides these young adults tools to use for the rest of their lives to promote health and well-being. With time constraints and billing limitations placed on practitioners to have positive results in a much shorter time period, new ideas and practices can be explored and implemented.

## **Literature Review**

### **Cognitive Behavioral Therapy**

Many mental disorders such as anxiety disorders, mood disorders, substance abuse disorders, and schizophrenia manifest themselves during adolescence and young adulthood. Transition to college is often a major change for an individual and often the individual is ill-equipped for this change. Review of the available literature indicated that young adults often forego mental health treatment. A common theme found in the literature was that young adults' lack the insight into the need for mental health care or thinking that the problem would go away

on its own. In addition, students were hesitant to seek out mental health treatment due to a lack of knowledge about mental health issues, treatment options, and community mental health resource availability (Rickwood, Deane, Wilson, & Ciarrochi, 2005). The transitional nature of young adulthood makes it difficult to establish appropriate support systems that would offer consistent mental health care (Yu et al. 2008).

CBT is based on the idea that the individual's emotions and behaviors are primarily how they perceive the world (Beck, Rush, & Emery, 1979). Negative or irrational beliefs in turn elicit negative emotions and behaviors. CBT is effective because it changes both the distorted/irrational thoughts and behaviors (Beck, Rush, & Emery, 1979). CBT interventions have demonstrated effectiveness in decreasing depressive symptoms, decreasing negative thinking, and increased positive self-esteem (Peden, et al., 2001).

The severity of depression is directly related to the degree of negative self-evaluation and pessimism (Beck, 1979). There is also a correlation between a negative view of the future and the negative view of self to support Beck's cognitive triad's role in depression. The cognitive triad is comprised of (a) negative view of the situation, (b) negative view of self and (c) negative view of the future (Beck, Rush, & Emery, 1979). The theory of the cognitive triad is a skewed view of a situation and self can lead to negative outlook of life.

Negative emotions and behaviors have a greater impact on the individual who has skill deficits such as poor problem solving skills, negative thoughts leading to negative behaviors, and poor view of self/future. These negative perceptions can lead to increased risk of depression and anxiety (Melnyk, 2009). Based on theory of CBT, Melnyk (2009) proposed that education of the students beliefs and confidence in their ability to follow through or be successful, will lead to fewer episodes of depression and anxiety symptoms in adolescents.

CBT can assist the student to uncover and alter misrepresentations of thought or perceptions which may be leading to or prolonging psychological distress (Mulhauser, 2011). CBT describes that the student will frequently experience an unjustifiable negative thought in response to an event or situation. The goal of CBT intervention is to help the individual become aware of the thought distortion that is causing the distress, recognize the behavioral patterns that reinforce it, and make necessary changes to correct them. Throughout this process the client acquires positive coping strategies as well as improved introspection and self-evaluation (Mulhauser, 2011).

Peden et al. (2001) reported the results of a longitudinal study to test the long-term effectiveness of a nurse-led CBT intervention on decreasing symptoms of college women at risk for clinical depression. They used a randomized controlled trial designed to reduce negative thinking, decrease depressive symptoms, and increase self-esteem among 18-24 year old college women that were seen at risk for clinical depression. Groups were allocated using a random assignment with 5 groups of 16 women (8 in control and 8 in the experimental) and 1 group of 12 (6 in each the control and experimental group). Inclusion criteria were (a) no prior treatment for psychiatric illness and no previous psychiatric care; (b) no prior antidepressant treatment; (c) no prior diagnosis of clinical depression; d) not suicidal, indicated by the rating on Item 9 of the Beck Depression Inventory (BDI) ; (e) single or never married; (f) no dependent children; and (g) a full-time student. There was no difference between the groups at baseline on other depressive, negative thinking, or self-esteem measurements. The findings of the study demonstrated that a reduction in depressive symptoms, negative thinking, and improvement in self-esteem were all positively affected by the intervention.

Peden et al. (2000) reported the results of an 18-month longitudinal study to determine if group CBT interventions focused on reduction of negative thinking would decrease or prevent depressive symptoms for groups at high risk for depression. The data were collected from 246 college women from the student population of a large state university. Depressive symptoms were measured by the BDI and indicated significant improvement with application of the CBT intervention. The intervention group received a 6-week cognitive-behavioral intervention and the control group received no intervention. The decreases in BDI scores were more dramatic with the intervention group compared to the control group at both the one-month and six-month follow-ups. At one month, 65% of the intervention group participants showed improvement in depressive symptoms compared to only 34% of the control group. At six months, 65% of the intervention group showed improvement from baseline depressive symptoms compared to only 17% of the control group. The results supported the effect of the CBT intervention in markedly reducing depressive symptoms and negative thinking as well as increasing self-esteem for college-age students. These results were maintained over time. Thus, CBT was demonstrated to be effective as a preventative strategy for an at risk sample of college age women (Peden et al., 2000).

Puskar, Grabiak, & Bernardo (2009) reported on the comparison of rural adolescents' coping responses before and after initiation of the intervention Teaching Kids to Cope (TKC-A). This was a quasi-experimental study in which 89 students ages 14-18 were randomly assigned to an intervention or control group. Group leaders were masters prepared mental health professionals that received an additional 12-hour training focusing on group therapy, being a group leader, and interventions protocol. The TKC-A intervention consisted of eight sessions designed to improve, coping, anger management and support. Each session was delivered in a



group setting using didactic content and activities reflecting a psycho-educational approach. The control group did not receive the TKC-A intervention. Coping responses were measured at baseline, post intervention, 6, & 12 months post intervention. Despite the lack of statistical significance in the study results, clinical significance was evident. The students in the intervention group reported impressive improvement in coping or sense of well-being. This continues to support CBT and interventions that can increase coping skills and improve problem solving in this population.

### **COPE Program**

Melnik (2003) developed the Creating Opportunity for Personal Empowerment (COPE) based on CBT techniques. Originally designed for adolescents and later adapted for young adults, the COPE program promotes positive coping skills to decrease depressive and anxiety symptoms. COPE is a guided seven-session program that can be completed either in individual or group sessions. COPE's scientific basis is built around CBT's theory of learning that proposes that if individuals are able to change automatic thoughts and negative beliefs, then they can change the way they think, feel, and behave. COPE focuses on the present and has homework assignments to reinforce the content of each lesson. The participants are encouraged to examine their negative thinking and use the information gained from the lessons to change their negative thoughts to positive (Lusk & Melnyk, 2011).

Interventions are guided by the COPE Young Adult Manual, but can be individually tailored to the specific student's needs. The seven sessions, are delivered in this order:

- Addressing the connection between thinking, feeling and behaving
- Developing positive thinking habits
- Building coping/stress skills

- Problem solving and goal setting
- Learning coping skills through positive thinking and communication skills
- Applying coping skills to stressful situations
- Pulling it all together

Lusk & Melnyk (2011) reported that despite the depression being prevalent in 9% of the adolescent population in the United States, yet, only 25% of these receive evidenced-based treatment. Lusk & Melnyk (2010) reported on the effectiveness of the COPE program on 15 adolescents (ages 12-17) who presented for treatment with depressive symptoms at a community mental health center. A single pre-experimental group pre and post intervention design was used to evaluate the intervention on teen depression, anxiety, self-concept, and disruptive behaviors. Following the intervention, paired t-tests showed a statistically significant decrease in mean Beck Youth Inventory Scale (2005) scores, indicating a decrease in depressive, anxiety, anger, and destructive behaviors in the teens. The investigators concluded that COPE was beneficial in the reduction of internalizing and externalizing depressive symptoms in adolescents.

Melnyk et al. (2009) conducted a study examining mental health disorders and overweight/obesity in a Hispanic adolescent population. The investigators evaluated a 15-session COPE program. It was delivered two to three times a week during the teens' nine-week health course. The 19 students who participated were randomly placed into either the intervention or non-intervention group; pre- and post-intervention measures were collected on both groups. Pre-intervention and outcome measurements were obtained by using the Beck Youth Inventory (second Edition; BDI-II) a 100-item self-report instrument that measures five constructs for youth. These constructs are: depression, anxiety, anger, disruptive behavior, and self-concept. Paired t-tests revealed that the intervention helped to decrease symptoms of

depression, anxiety, and increased commitment to healthy choices. Ultimately, the study indicated that COPE had a positive effect on depressive and anxiety symptoms as well as improving healthy lifestyle choices. The investigators indicated that cognitive beliefs were related to healthy lifestyle choices and behaviors as well as the level of depressive/anxiety symptoms.

### **Other Relevant Literature**

Prancer et al. (2004) examined the transition from high school to the university by utilizing a self-reported open-ended questionnaire. A sample of 110 incoming freshmen at Wilfrid Laurier University were placed in the intervention group or the control group. The Transition to University Program (T2U) was designed to provide a further comprehensive aid for students to deal with not only academic challenges but personal, emotional and social challenges faced by the majority of college students. The intervention group received the T2U program to help prepare for the trials and hardships of college. The control group was administered only the questionnaire. The challenges discussed included loss of established support system, larger classes with less support, responsibility for personal choices such as drinking, promiscuity (without parental disapproval), as well as the responsibility for their own finances and household chores. College attrition rates in the control group were 28% compared to the intervention group attrition rate of 7.8%. This project reinforced the hypothesis that programs like the T2U intervention and empowerment can positively affect the retention rate of college freshmen.

DeBerard, Spielmans, & Julka (2004) examined the psychosocial predictors for academic achievement and retention for college freshmen. This quantitative/non-experimental descriptive design study included 204 undergraduate students solicited from introductory psychology and sociology classes in a private west coast university. The investigators used the Multidimensional

Perceived Social Support Scale (MPSSS) to measure social support. Coping risk factors were measured by the Ways of Coping Checklist-Revised (WOC). Health status risk factors were smoking and alcohol consumption. Smoking was measured using a single-item question multiple choice response asking total number of cigarettes smoked per day (possible responses included: none, less than 6, between 7-19, and 20 or more). Alcohol consumption was assessed with a single-item related to frequency of binge drinking. Just over one-third of students reported regular binge drinking; 18% reported binge drinking one to two times per month and 18% reported binge drinking three or more times per month. General and mental health-related questions were assessed with the Short Form Health Survey (SF-36) which assesses general subjective dimensions of physical and mental health-related quality of life. The results were consistent with information from other studies and identified the presence of social support as being a major predictor for academic achievement in college age students.

Yu et al. (2008) reported on the comparison of the rate of mental health counseling (MHC) use between adolescents and young adults. The study had four specific aims (a) identify characteristics of young adults receiving mental health care; (b) compare differences in MHC during adolescence and young adulthood; (c) examine the predictors of counseling use in young adults; and (d) describe reasons self-reported by young adults as to why treatment is not sought after. Using a clustered sampling technique, a representative cohort sample was stratified by region, urban residence, school type, and school ethnic mix and size. Adolescent mental health problems were measured by using both self-report from an initial survey collected in 1995 and a follow-up survey collected seven years later. Respondents were asked if they required medical care but did not receive it. If they responded positively, further questions were used to check all reasons that applied to mental health. These later answers were reasons the respondent were

considered to have forgone mental health services despite the need. A total of 15 possible explanations were provided, which were categorized into access and non-access problems. The study reinforced that young adults have limited insight into when and how to ask for help especially when depressive symptoms are present.

Vanheusden et al. (2008) reported on the barriers to care in young adults with serious internalizing or externalizing problems. The study included 2,258 young adults between the ages of 19-32 and examined the reasons for not seeking treatment for mental health problems. Internalizing or externalizing problems were assessed with the Adult Self-Report questionnaire. Vanheusden et al. (2008) reported that 34.5% of young adults aged 19-32 utilized mental health services. The barriers to care, reflected in the study, were that many young adults have limited knowledge of mental health problems and what treatment is available, and where to find treatment assistance in the community.

The research suggests that CBT is an effective tool in decreasing symptoms of anxiety and depression in the young adult population. The research also suggests that young adults often do not utilize available mental health resources and often don't possess the knowledge of mental health symptoms within themselves. The COPE Program for the Young Adult would be an age-appropriate intervention for this transitional phase of the student's life.

## **Project Description**

### **Project Design**

The objectives of this project were to: (a) assess levels of anxiety and depression in identified at risk college students; (b) implement a new CBT-based intervention; and (c) evaluate the effectiveness of the intervention on students' levels of anxiety and depression and satisfaction with the intervention.

**Setting**

The project took place at Berea College in Berea Kentucky. Berea College is a private, liberal arts institution serving primarily first generation low income college students from all over the United States as well as other countries. It serves 54 states and territories and international students enrolled from approximately 70 countries around the world (Berea College Home Page, 2013). Berea College's overall mission is as follows "The experience nurtures intellectual, physical, aesthetic, emotional, and spiritual potentials and with these the power to make meaningful commitments and translate them into action" (Berea College Home Page, 2012). The mission of the Counseling and Disability Services is to "provide a professional and confidential setting for the psychological, emotional, and developmental support of students as they pursue academic goals and explore personal growth, and to act as a resource for faculty and staff to assist with their interactions with the students" (Berea College Home Page, 2012). The Counseling and Disability Services at Berea College, includes three mental health providers: a psychologist, a licensed clinical social worker, and a licensed marriage and family therapist. In 2011-2012, the mental health providers in the Counseling and Disability Services provided services for 364 students. Of these 364 students, 86 met the DSM-IV-TR (2000) criteria of an anxiety/stress disorder and 76 students met DSM-IV-TR (2000) criteria for a depressive disorder. Currently, a variety of interventions are used, including individual broad-based CBT, Dialectic Behavioral Therapy, and pharmacological treatment.

**Sample**

Thirteen participants were identified to participate in the COPE Young Adult program. Students in this program were undergraduates ranging in age from 19-23. All students were recent or prior patients in the Counseling and Disability Services with a DSM-IV-TR confirmed

diagnosis of either anxiety and/or depressive disorder. A complete psychiatric evaluation was completed by the project director to build therapeutic rapport and ensure that each client met the inclusion criteria.

### **Stakeholders**

The stakeholders in this project were the project leader and students, mental health providers, and administrators at the private liberal arts college.

### **Methods**

After inclusion criteria were verified, the participants were informed about the project objectives. Students provided written consent (Appendix A) for participation, then completed the pre-intervention BDI-II (Appendix B) and STAI (Appendix C).

The COPE Program for Young Adults targeted sessions were conducted in a one-on-one format between the project director and each individual participant. Each session focused on learning COPE techniques and reviewing homework assignments as outlined in the COPE Program for Young Adult Manual (Melnik, 2003). These seven 30-minute sessions were scheduled weekly. . Participants were offered a variety of options, including daytime or evening sessions to promote attendance. Once participants completed the seven individual sessions, they completed the post-intervention BDI-II, STAI, and the COPE Program for Young Adults Evaluation (Appendix D).

### **Measures**

#### **Beck Depression Inventory II**

The Beck Depression Inventory-second edition (BDI-II) (Beck, Steer, & Brown, 1996) was designed for ages 13 and older to assess the severity of depression consistent with the Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSM-IV-

TR, 2000). BDI-II is a 21-item self-reporting instrument that summarizes the way the individual has felt in the last two weeks. Each of the 21 items corresponds to a symptom of depression and is given a single score according to a Likert scale ranging from 0-3. Total score of 0-13 is considered minimal range; 14-19 is mild, 20-28 moderate, and 29-63 is considered severe (Beck, Steer, & Brown, 1996).

The original BDI instrument is one of the most widely used measures for identifying and assessing depressive symptoms, with high reports of reliability regardless of the age of the individual and has a high coefficient alpha, (.80). Its construct validity has been established, and has the ability to differentiate between depressed and non-depressed individuals. When the DSM-IV-TR was published several of the BDI questions required updating to reflect the alterations in diagnostic criteria. Like its predecessor, the BDI-II consists of 21 items based on DSM-IV criteria (Beck, Steer, & Brown, 1996) is aimed to assess the intensity of depression in clinical and normal patients. Each item is a list of four statements arranged in increasing severity about a particular symptom of depression.

Items on the new BDI-II scale replaced items that dealt with symptoms of weight loss, changes in body image, and somatic preoccupation. Other items from the original BDI that were reviewed was work difficulty changed to examine loss of energy, as well as sleep loss and appetite loss items were revised to assess both increases and decreases in sleep (Beck, et al. 1996). The BDI-II has a higher coefficient alpha (college students .93 and outpatients .92) than the BDI-I (.86). Test re-test reliability was evaluated by the response of 26 outpatients during the first and second sessions of treatment. There was a correlation of .93 demonstrating a significance at  $p < .001$  (Beck, Steer, & Brown, 2006). A sample item from the tool is as follows:

0 - I do not feel like a failure



- 1 - I feel I have failed more than the average person
- 2 - As I look back on my life, all I can see is a lot of failures
- 3 - I feel I am a complete failure as a person

(Beck, Steer, & Brown., 1996).

The BDI-II has a higher coefficient alpha (college students .93 and outpatients .92) than the BDI-I (.86). Test re-test reliability was evaluated by the response of 26 outpatients during the first and second sessions of treatment. There was a correlation of .93 demonstrating a significance at  $p < .001$  (Beck, Steer, & Brown, 2006). The BDI-II pretest Cronbach's alpha for this project was .94 and the BDI-II posttest Cronbach's alpha was .975. It should be noted that the posttest Cronbach's alpha was based on 20 items rather than the full 21. The item regarding sexual interest showed no variance and was removed from the reliability analysis.

### **The State-Trait Anxiety Inventory**

The State-Trait Anxiety Inventory (STAI) was originally designed for adolescents, college students, and adults (Spielberger, 1985). The self-reported test takes approximately 10 minutes to complete and can either be administered in a group or individual setting. STAI consists of 40 brief self-report questions that are designed to assess state and trait anxiety (Spielberger, 1985). Spielberger (1985) described state-anxiety (S-anxiety) as “temporal cross-section in the emotional stream of the life of a person, consisting of subjective feelings of tension, apprehension, nervousness, and worry, and activation or arousal of the autonomic nervous system” (p. 10). Spielberger (1985) reported that the S-anxiety could be measured in the here and now and that it fluctuated over time depending on the individual's perception of his/her environment as dangerous or threatening. Questions 1-20 of the instrument measure the S-anxiety. The trait anxiety (t-anxiety) refers to the individual's reaction to the perceived stressful

situation. Questions 21-40 of the instrument measure the participant's T-anxiety. Each STAI item has a weighted score of 1 to 4. The rating of a 4 indicates the presence of a high level of anxiety for ten S-Anxiety items and eleven T-Anxiety items (e.g., "I am tense," "I feel nervous"). A high rating indicates the absence of anxiety for the remaining ten S-Anxiety items and nine T-Anxiety items (e.g., "I feel secure," "I feel satisfied"). The scoring weights for the high anxiety items remain in the same order as the blackened numbers on the test form. The scoring weights for the anxiety-absent items are inverted. The inverted scoring weighted questions on the S-Anxiety and T-Anxiety scales are: S-Anxiety: 1, 2, 5, 8, 10, 11, 15, 16, 19, 20 and T-Anxiety: 21, 23, 26, 27, 30, 33, 34, 36, 39 (Spielberger, 1983).

According to Spielberger (1983) the STAI was used in over 2,000 studies since the manual was published in 1970. The test- retest correlation reported by Spielberger (1983) for the T-anxiety scale were reasonably high for the college students, ranging from .73 to .86 in the six subgroups tested. Spielberger (1983) reported the stability measured by test-retest is what would be expected while measuring or assessing changes in anxiety exacerbated by environmental stress. The overall median alpha coefficients for the S-anxiety and T-anxiety scales in the normative samples are .92 and .90 respectively, as compared to median alphas of .87 for the S-anxiety and .89 for the T-anxiety in the normative samples. The STAI has a high internal consistency and validity as evidenced by high alpha coefficients (Spielberger, 1983).

In this project, the State-Trait Anxiety Inventory reliability scores were broken down for analysis into two subscales. The State Anxiety subscale consists of the first 20 questions on the inventory. The Trait Anxiety subscale consists of the final 20 questions. In this sample, the State Anxiety Cronbach's alpha for the pre-intervention was .89 and the post-intervention was .94. The pre-intervention Trait Anxiety Cronbach's alpha was .75 and the post-intervention was

.95. It was recognized that the pre-intervention Trait Anxiety Cronbach's alpha, although acceptable, was notably different than the other reliability coefficients. To further evaluate, four items (two reversed items and two negatively scored items) were removed. The new Cronbach's alpha was .80.

### **COPE Young Adult Program Evaluation Form**

The COPE Young Adult Program Evaluation form is a 25-item open-ended questionnaire. The questions are designed to elicit responses from the participants indicating their perceptions of COPE. The questionnaire was designed by Melnyk (2003). Some sample questions include: "did you find the COPE program helpful"; "if you found the COPE program helpful, in what ways did it help you"; "what is the most helpful topic"; "do you think all college students should get the COPE program?"

### **Results**

Statistical Package for Social Science (SPSS) software version 21.0 was used to analyze the data. Paired t-tests were used to determine the impact of the COPE Program for Young Adults intervention on the mean scores for the Beck Depression Inventory-II and State-Trait Anxiety Inventory.

### **Sample Description**

Ten students completed participation in this program. The majority were Caucasian females. Students from all four undergraduate levels were included and ranged in age from 19-23. All students were recent or prior patients in the Counseling and Disability Services with a DSM-IV-TR confirmed diagnosis of anxiety and/or depressive disorder. The sample demographics are illustrated in Table 1.

Table 1

*Program Participants' Demographic Characteristics*

Demographic Variable	Groups	n	%
Gender	Male	2	20
	Female	8	80
Race	Caucasian	8	80
	African American	2	20
Year in College	Freshman	2	20
	Sophomore	2	20
	Junior	5	50
	Senior	1	10
Diagnosis	Anxiety Disorder	4	40
	Depressive Disorder	6	60

## Depression

The BDI-II total score categorizes respondents into four levels of depression: minimal (0-13), mild (14-19), moderate (20-28), or severe (29-63). In the current sample, all students scored in the moderate to severe depression categories at baseline with a mean BDI-II score of  $33.00 \pm 14.64$ . Post-COPE mean BDI-II scores decreased significantly  $11.30 \pm 11.66$ ; paired  $t(9) = 5.33$ ,  $p < .0001$ ) (Table 2). The mean decrease in BDI-II score was 21.70 with a 95% confidence interval ranging from 13.43 to 29.97. The magnitude of effect was large (eta squared = .79).

All ten participants demonstrated a decrease in depressive symptoms following the COPE intervention. Table 3 illustrates the changes in BDI-II scores from baseline to post-intervention measure. Only one participant continued to score in severely depressive range, but the BDI-II score decreased from 52 to 36. Three participants' scores demonstrated improvement from severe to minimal depression, two participants improved from severe to moderate depression, and two participants improved from moderate to minimal depression. Two participants were in the minimal range on the pre-intervention measurement, but still reflected a decrease in scores following the COPE program.

Table 2

*BDI-II: Results of Paired t-test from Pre- to Post-intervention*

BDI-II Measurement	Mean $\pm$ SD	t	df	p
Pre-intervention	33.00 $\pm$ 14.64	5.93	9	<.0001
Post-intervention	11.30 $\pm$ 11.66			

Table 3

*Changed in Individual Participants' BDI-II Depression Ratings from Pre- to Post-intervention*

Participant #	Pre-intervention		Post-Intervention	
	BDI-II Score	Depression Category	BDI-II Score	Depression Category
1	52	Severe	36	Severe
2	41	Severe	7	Minimal
3	44	Severe	1	Minimal
4	39	Severe	9	Minimal
5	38	Severe	24	Moderate
6	43	Severe	20	Moderate
7	28	Moderate	5	Minimal
8	27	Moderate	8	Minimal
9	11	Minimal	0	Minimal
10	7	Minimal	3	Minimal

## Anxiety

### State Anxiety

The State Anxiety Inventory measures the anxiety experienced by the participant in the two weeks prior to completing the inventory. A high score indicates a high level of state anxiety. All ten students demonstrated an improvement in state anxiety following the intervention. Mean State Anxiety Inventory scores improved significantly from pre-intervention ( $60.40 \pm 9.17$ ) to post-intervention ( $11.30 \pm 11.66$ ); paired  $t(9) = 6.51, p < .0001$  (Table 4). The mean decrease in BDI-II score was 18.70 with a 95% confidence interval ranging from 12.20 to 25.20. The magnitude of effect was large (eta squared = .82).

### Trait Anxiety

The Trait Anxiety Inventory measures how the participant handles stress/anxiety in general. A high score indicates a high level of trait anxiety. All ten students demonstrated an improvement in trait anxiety following the intervention. Mean Trait Anxiety Inventory scores improved significantly from pre-intervention ( $65.50 \pm 5.89$ ) to post-intervention ( $45.80 \pm 11.63$ ); paired  $t(9) = 6.33, p < .0001$  (Table 5). The mean decrease in BDI-II score was 9.70 with a 95% confidence interval ranging from 12.66 to 26.72. The magnitude of effect was large (eta squared = .82).



Table 4

*State Anxiety Inventory: Results of Paired t-test from Pre- to Post-intervention*

State Anxiety Measurement	Mean $\pm$ SD	t	df	p
Pre-intervention	60.40 $\pm$ 9/17	6.51	9	<.0001
Post-intervention	41.70 $\pm$ 11.66			

Table 5

*Trait Anxiety Inventory: Results of Paired t-test from Pre- to Post-intervention*

Trait Measurement	Mean $\pm$ SD	t	df	p
Pre-intervention	60.40 $\pm$ 9/17	6.51	9	<.0001
Post-intervention	41.70 $\pm$ 11.66			

**COPE for Young Adults Program Evaluation Form**

Participants completed a 25-item open-ended evaluation depicting their perceptions of the COPE project. The COPE program evaluation gave insight into how the participants perceived the intervention. All 10 of the participants felt the intervention was helpful and changed the way they saw themselves as well as situations that arose. Responses characterizing common themes to select questions are listed in Table 6. Ultimately, students felt that participation in COPE was, “definitely worth my time and effort”.

Data from the COPE Program for Young Adults Evaluation form may be used for future qualitative analysis.

Table 6

*COPE Evaluation: Selected Items and Responses Representing Common Themes*

Items	Responses
If you found the COPE program helpful, in what ways did it help you?	<ul style="list-style-type: none"> <li>• <i>“it has helped me to better understand my anxiety as well as provided me with skills to help control my anxiety and depression”</i></li> <li>• <i>“gave me different strategies to help deal with things”</i></li> <li>• <i>“. . . to strengthen skills to deal with triggers, primarily to change negative thinking as I was pretty good at recognizing my triggers. I was able to change some of my thought patterns and have skills to continue to do so”</i></li> <li>• <i>“it helped me to find/utilize techniques that help me reassemble my thoughts and control my actions”</i></li> </ul>
What else would you like to share about this COPE experience?	<ul style="list-style-type: none"> <li>• <i>“The COPE program has given me tools to use throughout the rest of my life. I am calmer and more confident and able to see things in a different light”</i></li> <li>• <i>“I hope this program does become a college course because I truly believe that many students will benefit from the experiences I experienced through this program”</i></li> <li>• <i>“just reiterate the effectiveness of the program”</i></li> <li>• <i>“at first I was skeptical that the positive statements would actually take root and be thing/thoughts that I could fall back on”.</i></li> <li>•</li> </ul>
Was the homework helpful	<ul style="list-style-type: none"> <li>• <i>“it helped me reflect my learning and put it into play”;</i></li> <li>• <i>“it was helpful because it made you think about real life anxiety/depression and how you are dealing with it”</i></li> <li>• <i>“made me put what was learning to use”.</i></li> </ul>

## Discussion

The findings from this project support the implementation of COPE Program for Young Adult for reducing both depressive and anxiety symptoms in college-students. . In the post-intervention data, 100% of the student sample demonstrated improvement in both the BDI-II and STAI scores (Tables 2, 4, and 5). Based on students' comments on the COPE Young Adult Project Evaluations, the project was well received and 100% of the participants thought the project was beneficial in providing the information and tools necessary to help college students deal with their individual needs/problems using CBT skills provided in the manual.

College is a major transition time, characterized by unique, individual problems that arise during this time of change. Rickwood, Deane, Wilson & Ciarrochi (2005) discussed that young adults were often unable to recognize mental health issues within themselves. The inability to recognize symptoms or the power to change thinking may have been demonstrated by those that dropped out of this project. Three participants did not complete the seven sessions of COPE Program for Young Adults. One student indicated that he did not have anxiety and that his issues were related to attention problems. He did not perceive that he would not benefit from COPE. Another participant that dropped out was unable, at the time of the project, to see herself able to change her thinking patterns, so she elected to continue individual therapy only. The third participant was also not motivated to attend the sessions despite self-reporting the need for changing his thought patterns.

Davis (2003) reported that mental health treatment has historically been designed for either children or older adults. Vanheusden et al. (2008) reported that treatment should be tailored to the specific needs of the young adult population with a particular style that engages and promotes healthy choices. COPE Program for Young Adults can be administered in a timely

manner that is tailored for the students' specific needs. All ten participants reported that the homework was helpful in allowing them to personalize the lessons to life situations. The homework allowed the participants to apply the lessons taught each week into life events and practice the learned skills. In addition, each participant was required to reflect and report how they incorporated the learned skills/thoughts at the next COPE session.

The COPE Program for Young Adults was reported by the participants as being helpful in offering a multitude of different ways to cope with life's challenges as well as how the individual looks and reacts to that challenge. The COPE manual was described as being easy to use and broke the process into steps that were clear and demonstrated progress as well as accountability for the participant. Based on the program evaluation, all 10 participants perceived that COPE was effective in facilitating change. The participants voiced that they felt better equipped to change their thought processes into more appropriate actions. The program evaluation also offered important suggestions for adapting the program to a wider population in a college setting.

The project leader encouraged each student to practice the CBT skills and techniques that were being taught in COPE. This support reinforced the belief in the use of CBT and the potential benefits provided through project participation. The therapeutic process reinforced the belief that situations can improve and that the student has the ability to make these changes. Reflection of the prior week's lesson allowed the student to actively see changes in thought patterns resulting in continued participation and desire to continue learning the skills.

The participants all showed statistical improvement in their depression, state anxiety, and trait anxiety scores post intervention. Clinical significance was also indicated; as all participants reported changing the way they perceived the triggers for stress and anxiety. This is an

important outcome, as the numbers of students entering into college have been reported to have record-low levels of emotional health (The American Freshman: National Norms for Fall 2012 Survey, 2012). This survey also reported that students who rated themselves as feeling overwhelmed did not seek counseling more often and were much less likely to report their emotional health compared to students who do not report feeling overwhelmed. This reinforces the report by Rickwood, Deane, Wilson, & Ciaarochi (2005) that young adults often lack knowledge of mental health and do not recognize the symptoms in themselves.

The majority of the participants in the COPE intervention stated that they believed COPE should be offered to all college students to help them learn to deal with life stressors more appropriately and efficiently. Since anxiety and depression were reported to be on the rise in college students (Sax, 1997) training in problem solving skills and coping skills need to be accessible. It is unclear whether students' ability to contact parents for immediate support has affected the student's ability to effectively cope with life's changes and demands when separated for the first time in college. The participants in the COPE intervention all reported improvements in negative thoughts and improved depression and anxiety. These findings support that the COPE Program for Young Adults would help build these needed skills for this population.

The small sample size (n=10) of the project is a limitation. A larger set of participants would lend itself to a more powerful program evaluation. The sample was limited in diversity; program participants were primarily Caucasian females. All participants in this program recently had been or currently were engaged in mental health therapy.

### **Implications and Recommendations**

This program evaluation demonstrated that the COPE intervention was effective in improving depressive and anxiety symptoms in college students. In this particular setting, the COPE program would be best facilitated by mental health providers in the Counseling and Disability Services at Berea College. The counselors should be trained by the project director or other experienced COPE provider and should use the COPE manual for implementation and evaluation of the COPE program.

The long-term goal would be to implement the COPE project into an orientation course for all incoming freshman at the university. The COPE manual is easy to follow and gives guided lessons to focus on skill building that could be built into a one-hour course. Building skills early on in the college career could provide more effective skills in dealing with stress and anxiety, preventing severe depressive and/or anxiety issues. Early interventions provide students with healthy life choices when stress or obstacles are met. A follow-up BDI-II and STAI at the end of the academic year would provide useful data.

### **Conclusion**

Assessment of all participants in this project demonstrated symptoms of depression and/or anxiety. The COPE Program for Young adults was successfully implemented in 10 of the 13 participants. There was an improvement in symptoms of depression and/or anxiety in all 10 participants who completed the program. The results of this project demonstrated that using a CBT-based intervention such as COPE was effective in decreasing depressive and anxious symptoms in this sample of college age participants. CBT has an abundance of evidence supporting its benefits in the reduction of symptoms in many populations. College entry is a major transition in students' lives with unique and specific issues. Tailoring a program that is



applicable to this population is valuable. The COPE intervention was both clinically and statistically significant in improving symptoms of depression and anxiety in participants in this project.

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Appendix A  
COPE Consent Form

## **Consent to Participate in a Quality Improvement Project**

### **Creating Opportunity for Personal Empowerment (COPE)**

#### **Why am I being asked to participate in this project?**

You are being invited to take part in an evidenced based practice project about the COPE Intervention. You are being invited to participate in this project because you have been diagnosed with an anxiety or depressive disorder and this program may decrease these symptoms, you are a student between the ages of 18-24. If you take part in this project, you will be one of about ten to twenty people to do so.

#### **Who is doing the project?**

The person in charge of this project is Rachael Hovermale, APRN, DNP student (PI) at Eastern Kentucky University. She is being guided in this project by Dr. Evelyn Parrish (chair), Dr. Bev Hart, and Dr. Cathie Velotta.

#### **What is the purpose of the project?**

By doing this project, we hope to learn if the implementation of an evidenced, age appropriate, treatment strategy will decrease anxiety and depression in at risk college students between the ages of 18-24.

#### **Where is the project going to take place and how long will it last?**

The implementation procedures will be conducted at Berea College. You will need to come to an appointment seven to eight times during the study. Each of those visits will take about thirty to sixty minutes. The total amount of time you will be asked to volunteer for this study is four to eight hours over the next 2-3 months.

#### **What will I be asked to do?**

Students will participate in COPE intervention which includes a seven session program that will be completed in individual sessions. The seven sessions are focused on CBT concepts and skills building. COPE's scientific basis is built around CBT's theory of learning how to change automatic thoughts and negative beliefs can also change the way one thinks and behaves. COPE focuses on the here and now approach, with homework emphasizing the lessons taught. The young adult is encouraged to examine their negative thinking and change that thought into a more realistic thought (Lusk & Melnyk, 2011). The first session deals with the connection between thinking, feeling and behaving. The second session focuses on developing positive thinking habits, and the third session focuses on building coping/stress skills. The fourth session deals with problem solving and goal setting. In the fifth session, students learn coping skills through positive thinking and communication skills. The sixth session teaches students how to cope with stressful situations. Finally, the seventh session helps to pull it all together (Lusk & Melnyk, 2011). Interventions are guided by the COPE manual, but can be individually tailored to the specific student's needs.

#### **Are there reasons why I should not take part in this project?**

If you do not feel that you can commit to attending the required 7 COPE sessions you can decline to participate.

If you are having active suicidal or homicidal ideation and need more intensive therapy.

#### **What are the possible risks and discomforts?**

Although we have made every effort to minimize this, you may find some questions we ask you (or some procedures we ask you to do) to be upsetting or stressful. If so, you can discuss this



with one of the therapists in the Berea Counseling and Disability Services who may be able to help you with these feelings.

**Will I benefit from taking part in this project?**

There is no guarantee that you will receive any benefit from taking part in this project. However, some people have experienced a decrease in anxiety and/or depressive symptoms when learning cognitive behavioral skills.

**Do I have to take part in this project?**

If you decide to take part in the project, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the project and still keep the benefits and rights you had before volunteering.

**If I don't take part in this project, are there other choices?**

If you do not want to take part in the project, there are other choices such as continuing with optional therapy provided by the Berea Counseling and Disability Services.

**What will it cost me to participate?**

There are no costs associated with taking part in this project.

**Will I receive any payment or rewards for taking part in the project?**

You will not receive any payment or reward for taking part in this project.

**Who will see the information I give?**

Your information will be combined with information from other people taking part in the project. When we write up the project results to share it with other researchers, we will write about this combined information. You will not be identified in these written materials.

We will make every effort to prevent anyone who is not on the project team from knowing that you gave us information, or what that information is. For example, your name will be kept separate from the information you give, and these two things will be stored in different places under lock and key.

However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court (IF APPLICABLE: or to tell authorities if we believe you have abused a child or are a danger to yourself or someone else). Also, we may be required to show information that identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as Eastern Kentucky University or Berea College.

**Can my taking part in the project end early?**

If you decide to take part in the project, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the project.

The individuals conducting the project may need to end your participation in the project. They may do this if you are not able to follow the directions they give you, if they find that your being in the project is more risk than benefit to you, or if the agency funding the study decides to stop the project early for a variety of scientific reasons.

**What happens if I get hurt or sick during the project?**

If you believe you are hurt or if you get sick because of something that is done during the project, you should call Rachael Hovermale APRN, DNP student at 859-622-2595 immediately. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in

this project. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

Usually, medical costs that result from project-related harm cannot be included as regular medical costs. You should ask your insurer if you have any questions about your insurer's willingness to pay under these circumstances.

**What if I have questions?**

Before you decide whether to accept this invitation to take part in the project, please ask any questions that might come to mind now. Later, if you have questions about the project, you can contact the investigator, Rachael Hovermale APRN, DNP student at 859-622-2595. If you have any questions about your rights as a project volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

**What else do I need to know?**

You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this project.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered, and agree to participate in this quality improvement project.

\_\_\_\_\_  
Signature of person agreeing to take part in the project

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of person taking part in the project

\_\_\_\_\_  
Name of person providing information to subject

Appendix B

Beck Depression Inventory-II

Date: 

Name: \_\_\_\_\_ Marital Status: \_\_\_\_\_ Age: \_\_\_\_\_ Sex: \_\_\_\_\_

Occupation: \_\_\_\_\_ Education: \_\_\_\_\_

**Instructions:** This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today**. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

**1. Sadness**

- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3 I am so sad or unhappy that I can't stand it.

**2. Pessimism**

- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

**3. Past Failure**

- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

**4. Loss of Pleasure**

- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

**5. Guilty Feelings**

- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

**6. Punishment Feelings**

- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

**7. Self-Dislike**

- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

**8. Self-Criticalness**

- 0 I don't criticize or blame myself more than usual.
- 1 I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

**9. Suicidal Thoughts or Wishes**

- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

**10. Crying**

- 0 I don't cry any more than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

Subtotal Page 1

Continued on Back

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<p><b>11. Agitation</b></p> <p>0 I am no more restless or wound up than usual.</p> <p>1 I feel more restless or wound up than usual.</p> <p>2 I am so restless or agitated that it's hard to stay still.</p> <p>3 I am so restless or agitated that I have to keep moving or doing something.</p> <p><b>12. Loss of Interest</b></p> <p>0 I have not lost interest in other people or activities.</p> <p>1 I am less interested in other people or things than before.</p> <p>2 I have lost most of my interest in other people or things.</p> <p>3 It's hard to get interested in anything.</p> <p><b>13. Indecisiveness</b></p> <p>0 I make decisions about as well as ever.</p> <p>1 I find it more difficult to make decisions than usual.</p> <p>2 I have much greater difficulty in making decisions than I used to.</p> <p>3 I have trouble making any decisions.</p> <p><b>14. Worthlessness</b></p> <p>0 I do not feel I am worthless.</p> <p>1 I don't consider myself as worthwhile and useful as I used to.</p> <p>2 I feel more worthless as compared to other people.</p> <p>3 I feel utterly worthless.</p> <p><b>15. Loss of Energy</b></p> <p>0 I have as much energy as ever.</p> <p>1 I have less energy than I used to have.</p> <p>2 I don't have enough energy to do very much.</p> <p>3 I don't have enough energy to do anything.</p> <p><b>16. Changes in Sleeping Pattern</b></p> <p>0 I have not experienced any change in my sleeping pattern.</p> <hr/> <p>1a I sleep somewhat more than usual.</p> <p>1b I sleep somewhat less than usual.</p> <hr/> <p>2a I sleep a lot more than usual.</p> <p>2b I sleep a lot less than usual.</p> <hr/> <p>3a I sleep most of the day.</p> <p>3b I wake up 1-2 hours early and can't get back to sleep.</p>	<p><b>17. Irritability</b></p> <p>0 I am no more irritable than usual.</p> <p>1 I am more irritable than usual.</p> <p>2 I am much more irritable than usual.</p> <p>3 I am irritable all the time.</p> <p><b>18. Changes in Appetite</b></p> <p>0 I have not experienced any change in my appetite.</p> <hr/> <p>1a My appetite is somewhat less than usual.</p> <p>1b My appetite is somewhat greater than usual.</p> <hr/> <p>2a My appetite is much less than before.</p> <p>2b My appetite is much greater than usual.</p> <hr/> <p>3a I have no appetite at all.</p> <p>3b I crave food all the time.</p> <p><b>19. Concentration Difficulty</b></p> <p>0 I can concentrate as well as ever.</p> <p>1 I can't concentrate as well as usual.</p> <p>2 It's hard to keep my mind on anything for very long.</p> <p>3 I find I can't concentrate on anything.</p> <p><b>20. Tiredness or Fatigue</b></p> <p>0 I am no more tired or fatigued than usual.</p> <p>1 I get more tired or fatigued more easily than usual.</p> <p>2 I am too tired or fatigued to do a lot of the things I used to do.</p> <p>3 I am too tired or fatigued to do most of the things I used to do.</p> <p><b>21. Loss of Interest in Sex</b></p> <p>0 I have not noticed any recent change in my interest in sex.</p> <p>1 I am less interested in sex than I used to be.</p> <p>2 I am much less interested in sex now.</p> <p>3 I have lost interest in sex completely.</p>
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Subtotal Page 2

Subtotal Page 1

Total Score

Appendix C

State Trait Anxiety Inventory for Adults

**State-Trait Anxiety Inventory for Adults****Manual and Sample****Manual, Instrument and Scoring Guide**

Developed by Charles D. Spielberger

in collaboration with R.L. Gorsuch, R. Lushene, P.R. Vagg, and G.A. Jacobs

Published by Mind Garden, Inc.

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**SELF-EVALUATION QUESTIONNAIRE STAI Form Y-1**

**Please provide the following information:**

Name \_\_\_\_\_ Date \_\_\_\_\_ S \_\_\_\_\_

Age \_\_\_\_\_ Gender (Circle) **M** **F** T \_\_\_\_\_

**DIRECTIONS:**

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right now*, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

VERY MUCH SO  
MODERATELY SO  
SOMEWHAT  
NOT AT ALL

- 1. I feel calm ..... 1 2 3 4
- 2. I feel secure ..... 1 2 3 4
- 3. I am tense ..... 1 2 3 4
- 4. I feel strained ..... 1 2 3 4
- 5. I feel at ease ..... 1 2 3 4
- 6. I feel upset ..... 1 2 3 4
- 7. I am presently worrying over possible misfortunes ..... 1 2 3 4
- 8. I feel satisfied ..... 1 2 3 4
- 9. I feel frightened ..... 1 2 3 4
- 10. I feel comfortable ..... 1 2 3 4
- 11. I feel self-confident ..... 1 2 3 4
- 12. I feel nervous ..... 1 2 3 4
- 13. I am jittery ..... 1 2 3 4
- 14. I feel indecisive ..... 1 2 3 4
- 15. I am relaxed ..... 1 2 3 4
- 16. I feel content ..... 1 2 3 4
- 17. I am worried ..... 1 2 3 4
- 18. I feel confused ..... 1 2 3 4
- 19. I feel steady ..... 1 2 3 4
- 20. I feel pleasant ..... 1 2 3 4



For use by rachael hovermale only. Received from Mind Garden, Inc. on September 13, 2012

**SELF-EVALUATION QUESTIONNAIRE**

STAI Form Y-2

Name \_\_\_\_\_ Date \_\_\_\_\_

**DIRECTIONS**

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you *generally* feel.

ALMOST NEVER  
SOMETIMES  
OFTEN  
ALMOST ALWAYS

- 21. I feel pleasant ..... 1 2 3 4
- 22. I feel nervous and restless ..... 1 2 3 4
- 23. I feel satisfied with myself..... 1 2 3 4
- 24. I wish I could be as happy as others seem to be ..... 1 2 3 4
- 25. I feel like a failure..... 1 2 3 4
- 26. I feel rested..... 1 2 3 4
- 27. I am "calm, cool, and collected" ..... 1 2 3 4
- 28. I feel that difficulties are piling up so that I cannot overcome them ..... 1 2 3 4
- 29. I worry too much over something that really doesn't matter..... 1 2 3 4
- 30. I am happy..... 1 2 3 4
- 31. I have disturbing thoughts..... 1 2 3 4
- 32. I lack self-confidence ..... 1 2 3 4
- 33. I feel secure..... 1 2 3 4
- 34. I make decisions easily ..... 1 2 3 4
- 35. I feel inadequate..... 1 2 3 4
- 36. I am content..... 1 2 3 4
- 37. Some unimportant thought runs through my mind and bothers me..... 1 2 3 4
- 38. I take disappointments so keenly that I can't put them out of my mind ..... 1 2 3 4
- 39. I am a steady person..... 1 2 3 4
- 40. I get in a state of tension or turmoil as I think over my recent concerns and interests ..... 1 2 3 4

Appendix D  
COPE Program Evaluation Form

Date:

\_\_\_\_\_Code Number

## COPE PROGRAM EVALUATION FORM

Please answer the following questions.

- 1) Did you find the COPE program helpful? \_\_\_\_yes \_\_\_\_no
- 2) If you found the COPE program helpful, in what ways did it help you?
- 3) If you do not think the COPE program was helpful, please describe why it was not helpful?
- 4) What did you like best about the COPE program?
- 5) What did you like least about the COPE program?
- 6) What, if anything, have you changed since starting the COPE program?
- 7) What is the most helpful topic in the COPE program?
- 8) Why was this topic helpful?
- 9) What topic in the COPE program would you have liked to spend more time on?
- 10) What topic in the COPE program would you have liked to spend less time on?
- 11) What new or different thoughts do you have about dealing with stress, concerns or things that worry you?
- 12) What things that you learned in the COPE program do you plan to continue to use?
- 13) What would you change about the COPE program?
- 14) Was the homework in the COPE program helpful to you? \_\_\_\_yes \_\_\_\_no
- 15) If the homework was helpful, how was it helpful?
- 16) If the homework was not helpful, why did you find it unhelpful?

- 17) If you did not complete all of your homework assignments, why did you not complete them?
- 18) Did you like the length of the COPE sessions? (30 minutes) \_\_\_\_yes \_\_\_\_no
- 19) What would you tell a friend about the COPE program?
- 20) Do you think all college students should get the COPE program?  
\_\_\_\_ yes (if yes, why?) \_\_\_\_ no (if no, why?)
- 21) Did you learn new ways to deal with your thoughts? \_\_\_\_yes \_\_\_\_no
- 22) Did you learn new ways to deal with your feelings? \_\_\_\_yes \_\_\_\_no
- 23) Did you learn new ways to deal with your behaviors? \_\_\_\_yes \_\_\_\_no
- 24) What were barriers for your coming to all of the COPE appointments (if any)?  
(for example, time of the appointments, transportation, work schedules)
- 25) What else would you like to share about this COPE experience?

Thank you for completing this evaluation of the COPE program!!

Appendix E

Letter of Support for Off-Campus Research

## Letter of Support for Off-Campus Research

[Date]

Institutional Review Board:

As an authorized representative of Berea College, I grant approval for Rachael Hovermale, Advanced Practice Registered Nurse (APRN), and Doctor of Nursing Practice student from Eastern Kentucky University to implement an evidenced based practice treatment strategy involving human subjects at my organization. I understand that the purpose of this project is to implement the Creating Opportunities for Personal Empowerment (COPE) to decrease anxiety and depression in at risk college students.

I grant permission for this project to involve Berea College students between the ages of 18-24 with a diagnosis of either a depressive or anxiety disorder and are seeking assistance from Berea College Counseling and Disability Services. I have determined these individuals to be appropriate participants for this project. I understand the students will be asked to participate in seven individual APRN-led sessions focusing on improving coping skills. The participants will be asked to respond to questionnaires to assess their mental health status both pre-and-post interventions to evaluate the effectiveness of the COPE strategy.

To support this project, I agree to assist in arranging for access to participants, allowing input from the counseling service therapist in the participant identification process, and providing office space for the sessions.

Supervision of this project will be provided by the Department of Baccalaureate and Graduate Nursing faculty and Capstone Advisor, Dr. Evelyn Parrish, PhD, RN.

Sincerely,

[Name of authorized representative]

[Title]