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An Evaluation of the Attitudes, Beliefs, and Mental Health Literacy of Young African American College Graduates

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The University of Southern Mississippi

AN EVALUATION OF THE ATTITUDES, BELIEFS, AND MENTAL HEALTH LITERACY OF YOUNG AFRICAN AMERICAN COLLEGE GRADUATES

by

Marshae Antoinette McNeal

Abstract of a Dissertation
Submitted to the Graduate School
of the University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

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ABSTRACT

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The aim of this study was to examine the relationships between the attitudes, beliefs, and mental health literacy of young college-educated African Americans as compared to their Caucasian counterparts. Previous research indicates these two populations differ when receiving services for mental illness. The goal of this study was to see if this difference is due to their mental health literacy level, attitudes toward seeking help, as well as their attitudes and beliefs toward mental illness. A quantitative analysis was conducted using elements of the MacArthur Mental Health Module and the Attitudes toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF) to assess the elements of interest in the study. The MacArthur Mental Health Module uses vignettes to describe an individual experiencing a mental health crisis with follow-up questions regarding causes, the likeliness of the situation improving, and options for treatment. A quantitative analysis was conducted using chi-square, t-test, MANOVA, and correlational analyses. The findings of this study indicate mental health literacy and attitudes are not connected, but the results do hold interesting implications for further research. African Americans in this study displayed positive attitudes toward professional psychological help and were able to correctly identify described mental health problems based on signs and symptoms explained in the vignettes. Further research is needed to see how attitudes and behaviors are connected.

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CHAPTER I

INTRODUCTION

Background

Health and healthcare have long been priorities in the United States. According to the Centers for Disease Control (CDC), chronic diseases account for 75% of the more than $2.3 trillion spent by Americans on health care in 2008 (Pleasant, 2011). These diseases include heart disease, obesity, diabetes, and cancer (Pleasant, 2011). Studies show populations with the least amount of education and the highest poverty rates are also those with the poorest health (Kerka, 2000). “Life expectancy is lower and the incidence of chronic diseases higher among the lowest income groups” (Kerka, 2000, p. 3). There are strong arguments that health prevention programs can help with these issues. Disease prevention programs have demonstrated an increase in health literacy. Pleasant (2011) suggests the efforts of health care reform targeted toward the development and launch of prevention programs will prove that focusing on prevention, integrative approaches, and health literacy will be successful in producing healthier people and a more efficient health care system.

Mental disorders and mental illness are defined by Healthy People 2020 (U.S. Department of Health and Human Services [HHS], 2011). Mental disorders, according to Healthy People 2020, are “characterized by alterations in mood, thinking, or behavior associated with distress or impaired functioning” (HHS, 2011, p. 1). Mental illness refers to all diagnosable mental disorders collectively (HHS, 2011). People that have been diagnosed with chronic diseases are also affected by mental illness (HHS, 2011). Many people with a mental illness do not get the help they need. The prevalence of mental

disorders is greater among the young adult population (Gulliver, Griffiths, & Christensen, 2010). This prevalence along with reluctance to seek help puts this age group at a high risk (Gulliver et al., 2010).

The term "health literacy" first emerged in 1974 and has seen a rapid increase in interest from the early 1990s to the present day (Pleasant, 2011). Health literacy is defined in numerous ways. According to the American Cancer Society, health literacy involves skills such as obtaining, understanding, and interpreting health information and services in its most basic form as well as having the competence to use this information and these services to enhance health (Kerka, 2000). The definition by Healthy People 2010 is very similar (U.S. Department of Health and Human Services, 2000).

Related to the concept of health literacy, researchers have begun to look closely at mental health literacy as a separate concept. Healthy People 2020 (HHS, 2011) defines mental health as "a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges" (p. 1). According to the CDC (2011), mental health is a "state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (p. 1).

In 1997, Jorm (2012) and his colleagues in Australia developed the concept of mental health literacy in response to the lack of research and action on public knowledge and beliefs about mental disorders. Mental health literacy, as defined by Jorm (2000), "is knowledge and beliefs about mental disorders which aid in their recognition, management, or prevention" (p. 396). This definition has the same characteristics as the

definitions of health literacy, only it is subject specific to mental health. Jorm (2012) states mental health literacy is not merely being able to correctly identify mental disorders, but it is also wisdom connected to the chance of action to aid their own mental health as well as others. Jorm (2000) notes public knowledge of mental disorders has not received the same attention as other diseases such as cancer or heart disease. Being able to recognize mental disorders is necessary because it influences a person's attitude and behavior towards those who are affected (Lauber, Ajdacic-Gross, Fritschi, Stulz, & Rossler, 2005).

The findings of a study by Gulliver et al. (2010) indicated that improving mental health literacy and programs to reduce stigma and increase help seeking are needed for the young adult population. Another finding revealed that people are reluctant to seek treatment for fear of the negative impact on their employment (Regier, Hirschfield, Goodwin, Burke, Lazar, & Judd, 1988). A study conducted by Sharp (2007) indicated efforts to increase mental health literacy have a significant impact on attitudes toward seeking professional mental health services and in opinions about mental illness. The results provide further evidence that increasing mental health literacy influences attitudes and beliefs related to mental illness.

A study on the racial differences in receipt of mental health services by young adults showed that college-educated African Americans are less likely to receive mental health services when compared to their Caucasian counterparts in the study (Broman, 2012). Among the study participants, African Americans were less likely to receive services than all other racial or ethnic groups. These results extend what has been previously hypothesized and found in previous research. Previous research indicates as

education increases, the likelihood of receiving any healthcare services increases, no matter the race or ethnicity. As education increased, the likelihood of receiving services decreased for African Americans and increased for Caucasians (Broman, 2012). Another important finding in this study is how stigma may be a concern for many African Americans in the utilization of mental health services. These results are consistent with previous results from mental health studies. According to the results of Broman's (2012) study, stigma is likely a large contributor to the lack of receipt of services for educated African Americans who are more likely to have professional level jobs when compared to other races. In addition to stigma, lower trust and beliefs about mental health and mental health professionals are also factors (Broman, 2012). The current study seeks to determine if there is a connection between these beliefs and levels of mental health literacy.

Statement of the Problem

Each year in the United States, one in two Americans is diagnosed with a mental disorder (CDC, 2011). Of those diagnosed, 44 million are adults. A goal of Healthy People 2020 (HHS, 2011) is to "improve mental health through prevention and by ensuring access to appropriate, quality mental health services" (p. 1). In order to combat these issues and reach Healthy People 2020's goal, recent research has been conducted to determine if increasing the level of mental health literacy of adults will make a difference in attitudes, decrease stigma, and ultimately, increase the likelihood of adults seeking treatment for mental illness. Research conducted by Jorm, Barney, Christensen, Highet, Kelly, and Kitchener (2006) has determined that mental health disorders are not well recognized by the public, meaning people may not recognize when another individual or

they themselves may experiencing a mental health crisis. Results from previous research are limited in geographical scope (i.e. primarily Australia and some other countries other than the U.S.) but have demonstrated improvements in the public's mental health literacy through the use of several interventions (Jorm et al., 2006). However, there is little research on whether these interventions have had an impact on reducing stigma or changing people's behavior. A report by Cabassa (2009) indicated that, in relation to stigma, racial and ethnic differences exist in mental health literacy between certain populations.

Theoretical Framework

There are two theories that guided this study. The theories are derived from two disciplines: transformative or transformational learning theory from adult education and the Theory of Reasoned Action often used in health education. Both of these theories provide guidance when studying the mental health literacy of adults. Since many of the goals and competencies of health promotion and adult education overlap, it was appropriate to employ theories from both fields to guide this study.

Jack Mezirow's transformative learning is an adult education theory introduced in 1978. This theory can be applied when studying the mental health literacy of adults. As the term "transformation" suggests, transformative learning is about change in the way in which individuals see themselves and the world they live in, in response to new experiences that challenge their beliefs or world view (Merriam, Caffarella, & Baumgartner, 2007). Mezirow (1997) defines transformative learning as the process of changing an individual's "frame of reference." Frames of reference include the concepts, feelings, values, associations, and conditioned responses adults have acquired over time

through experiences and have defined who they are (Mezirow, 1997). These frames of reference ultimately define how an adult may react to certain situations. Any combination of spiritual, emancipatory, political, or development components can be involved (Phillipi, 2010).

The Theory of Reasoned Action (TRA) is a theoretical construct concerning individualized motivational factors as determinants of the likelihood of performing a specific behavior, first introduced in 1967 by Martin Fishbein (Fishbein, 1967). The TRA involves the relationship between beliefs, attitudes, intentions, and behavior (Montano & Kasprzyk, 2002). There are two basic assumptions underlying the TRA. These assumptions are 1) behavior is under volitional control, meaning the individual can exercise a large degree of control over the behavior; and 2) people are rational beings (Redding, Rossi, Rossi, Velicer, & Prochaska, 2000).

Fishbein (1967) developed the TRA as a way to understand the relationship between behavior and attitudes. Behavior is influenced by the intention to perform certain behaviors according to the TRA (Redding et al., 2000). One of the central portions of the TRA that relates to this study is that there are two general types of beliefs considered, normative and behavioral. Normative beliefs are situationally-based social expectations that influence subjective norms (Redding et al., 2000). Subjective norms are determined by the individual's normative beliefs, whether those people most important to the individual approve or disapprove of performing a behavior, and the individual's motivation to comply with those people (Montano & Kasprzyk, 2002). The fact that the individual cares what other people think is known as the subjective norm. The people

most important to the individual include a spouse, parents, close friends, coworkers, experts, and professionals such as physicians (McKenzie & Smeltzer, 1997).

Purpose of the Study

The purpose of this study was to assess the levels of mental health literacy among young college-educated African Americans to determine if there was a relationship between their mental health literacy and their attitudes and beliefs toward mental illness and seeking help for mental illness as compared to Caucasian Americans.

Research Questions and Hypothesis

The goal of this study was to determine if mental health literacy in young college-educated African Americans is related to their attitudes toward seeking help for mental illness, as well as their attitudes and beliefs toward mental illness overall as compared to Caucasian Americans. It was hypothesized that low mental health literacy contributes to attitudes surrounding help-seeking as well as attitudes and beliefs toward mental illness.

This study attempted to answer the following research questions:

- Is there a relationship between mental health literacy and attitudes surrounding help-seeking behaviors?
- Is there a relationship between mental health literacy and attitudes and beliefs related to mental illness?
- Is there a relationship between demographics such as race and education and mental health literacy?

Definitions

Health literacy – skills such as obtaining, understanding, and interpreting health information and services in its most basic form as well as having competence to use this

information and these services to enhance health (Kerka, 2000); "a constellation of skills, including the ability to perform basic reading and numerical tasks required to function in the health care environment" (Pleasant, 2011, p. 45); the critical ability to interpret media messages and the capacity to access and use technology that delivers health information in addition to be able to read a prescription label (Kerka, 2000).

Mental health – "a state of successful performance of mental function allowing an individual to have productive activities, fulfilling relationships, and the ability to adapt to change and handle challenges" (HHS, 2011, p. 1); "state of well-being where an individual realizes their own abilities, finds ways to cope with the normal stresses of life, works productively, and can make a contribution to their own community" (CDC, p. 1).

Mental disorders – "actual health conditions characterized by alterations in mood thinking, or behavior associated with distress or impaired functioning" (HHS, 2011, p. 1).

Mental illness – "all diagnosable mental disorders collectively" (HHS, 2011, p. 1).

Mental health literacy – "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention" (Jorm, 2000, p. 396).

Young adult – between the ages of 18 – 40 as indicated by Erik Erikson's stages of psychosocial development (Bastable, 2006)

Help-seeking – "behavior of actively seeking help from others to obtain help…in terms of understanding, advice, information, treatment, and general support in response to a problem or distressing experience…based on social relationships and interpersonal skills" (Rickwood, Deane, Wilson, & Ciarrochi, 2005, p. 4).

Delimitations

This study was delimited to African Americans and Caucasian Americans who have graduated from a four-year or two-year academic institution and are between the ages of 21 and 34 residing in the U.S.

Assumptions

There were certain assumptions regarding this study. It was assumed that each of the participants would complete all survey questions honestly and to the best of their ability. Questionnaires were anonymous and kept confidential. The participants were advised that their participation was voluntary and they could decline participation without any ramifications. Along with these assurances, it was assumed each participant would complete the questionnaire themselves. It was also assumed that each participant would meet the selection criteria.

Justification

There are several studies on the significance of mental health literacy. Bartlett, Travers, Cartwright, & Smith (2006) found that many of the respondents in their study correctly identified mental disorders as a result of the recent initiatives in Australia to improve mental health literacy. Participants in a study by Kitchener & Jorm (2002) were able to recognize a mental disorder in a vignette, exhibited changes in their beliefs about treatment to be more like those of health professionals, decreased stigmatizing attitudes, increased confidence in providing help to someone with a mental problem, and increased the amount of help provided to others after participation in a mental health literacy education program.

This study is situated in adult education as a contribution to the current literature on health literacy. It is known that the Adult Basic Education arena, through the context of building life skills, can contribute to building health literacy skills (Diehl, 2011). Also, the competencies and goals between health promotion and adult education overlap (Diehl, 2011). Freedman, Miner, Echt, Parker, and Cooper (2011) believe the adult education field is a prime location for the teaching of health literacy. Diehl (2011) states the ABE classroom is a well-positioned environment to meet the needs of learners, which includes promoting personal and family health, preventing and managing disease, and navigating health care services. Adults with strong and limited literacy skills face the same health-related challenges. These challenges include the need to establish a healthy diet, maintain a healthy lifestyle, and take care of family members (Rudd, 2007). They are also challenged with learning new information and asked to understand and take action in the face of new diseases and new therapies (Rudd, 2007).

White, Chen, and Atchinson (2008) studied the relationship between preventive health practices and health literacy. Among the young adults in the study, lower health literacy was associated with a lower likelihood to receive preventive treatment. Preventive interventions for mental disorders aim to reduce incidence, prevalence, and the reemergence of mental disorders by focusing on the reduction of risk factors and enhancing protective factors associated with mental health (World Health Organization [WHO], 2004). This demonstrates the importance of preventive measures. During the transition into young adulthood a number of potentially stressful developmental milestones take place. These include the formation of romantic and sexual relationships, self-identity, and independence (Maulik, Mendelson, & Tandon, 2011). Young adults are

very likely to have mental health problems and are highly unlikely to seek treatment (Marcus, Westra, Eastwood, Barnes, & MMRG, 2012). A relatively mild mental health problem can lead to social, emotional, or cognitive changes that can have a major effect on adult life (Rickwood et al., 2005). Opportunities for achievement can be negatively affected. The results of the study by White, et al. (2008) indicate this is an area that needs attention among this population. Understanding the experiences of young adults and their attitudes toward receiving care is critical to finding interventions to better address these problems (Marcus et al., 2012).

There is limited research regarding the population and topic area chosen for this study. Most of the literature indicates those with higher education have a higher level of health literacy. The research on young adult, college-educated African Americans indicates further research is needed. Although there are varieties of research surrounding health literacy and its place in adult education, there is a lack of information related to mental health literacy specifically. Also, many mental health disorders develop or first appear in this age group. Farrer, Leach, Griffiths, Christensen, & Jorm (2008) found that young adults have a tendency to over-identify signs and symptoms related to mental illnesses. Failure to provide service to young adults in need has a potential significant impact on the individual and society including loss of productivity at work, school dropout, and increases in taxpayer costs for tertiary care and rehabilitation (Maulik et al., 2011). African Americans had worse self-reported health status when compared to the other groups in a study conducted by Howard, Sentell, & Gazmararian (2006).

Many of the studies examined from the literature related to mental health literacy have dealt mostly with college-aged students. This study would provide a different

perspective as it will examine young adults who have graduated from college and most likely have entered into the workforce. A study by Schwartz, Woloshin, Black, and Welch (1997) yielded results that even individuals with a college education have difficulty understanding and utilizing medical information. Previous research also found that people are reluctant to seek treatment for fear of the negative impact on their employment (Regier et al., 1988). This could possibly be a factor for young adult college-educated African Americans.

This study also has the potential to demonstrate whether mental health literacy is an indicator of whether or not African Americans seek treatment for mental health and impacts their stigmatizing attitudes toward mental health. The National Alliance on Mental Illness (NAMI) (2009) mentions several circumstances that keep African Americans from seeking treatment for mental illness such as homelessness, lack of medical resources, and lack of education. Even though many of these circumstances are most likely not factors for young adult college-educated African Americans, this population is still less likely to receive services. This could be a result of their level of mental health literacy.

NAMI (2009) also states new innovations and implementation of new programs can combat this issue. If mental health literacy is an issue for this population, then this would provide evidence that innovations are needed with the young adult population to improve their mental health literacy. If the results indicate this population has a low level of mental health literacy, the initiation of new projects related to increasing mental health literacy for this population may be developed. Studies related to mental health literacy are very limited. This study can add to and possibly expand the research, especially for the

United States and for the adult education field. The current study will also relate to the field of health education and health promotion. Previous research has shown many of the competencies and goals of health promotion and adult education fields overlap. Because there is an overlap, the health education and health promotion fields can only benefit from the results.

This study will provide more insight into the connection between the fields of adult education and health promotion, as the competencies and goals of the fields overlap. Since special efforts are being made in the adult education field around health literacy, mental health literacy will be a fit for this continued research. The adult education field has resources that can make a difference in adult learners' lives and has the ability to work with health and community professionals to further build health skills among adult learners (Diehl, 2011). Rudd, Anderson, Oppenheimer, and Nath (2007) state the degree to which mental health literacy will be integrated as a separate concept into research and practice has yet to be seen, but will presumably have significant implications for the tone and direction of future research in the field.

CHAPTER II

LITERATURE REVIEW

Health literacy has been widely accepted and explored whereas mental health literacy has only recently been explored. This review will highlight the common forms of mental illnesses among African Americans, knowledge and beliefs regarding mental illness, the impact and prevalence of mental disorders, underutilization of mental health services, mental illness and African Americans, mental health literacy research, theory, and the connection to adult education. Few studies have specifically highlighted mental health literacy in relationship to one particular race or ethnic group, and the literature has several gaps and opportunities for research related to mental health literacy. This literature review provides a snapshot of what has been studied so far in the field. Recent tragedies involving up and coming chef Josh Marks and professional actor Lee Thompson Young, two young, successful, college educated African Americans, both dealing with bipolar disorder, has shed light on mental illness in the African American community. Both of these young men died from suicide.

Common Forms of Mental Illnesses among African Americans

Mental illness can take many forms, from mild to severe. Some may only interfere slightly with daily life and some may require care in a hospital or institution. Mental disorders can affect personality, thinking, mood, perception, or behavior (American Psychiatric Association, 2012). According to the American Psychiatric Association (2012), the following mental illnesses are the most common forms experienced by African Americans.

Anxiety disorders – a response to fear or stress; when it becomes extreme and disrupts everyday life it becomes a disorder (American Psychiatric Association, 2012). There are several types of anxiety disorders. The American Psychiatric Association (2012) lists the following anxiety disorders as the most common: panic disorders, obsessive compulsive disorders (OCD), post-traumatic stress disorders (PTSD), social anxiety disorders, specific phobias, and generalized anxiety disorders (GAD). With a panic disorder, a person feels a sudden attack of fear in reaction to some perceived threat, often resulting in a panic attack (American Psychiatric Association, 2012). OCD is characterized by undesired and often irritating thoughts, which can cause the person with the disorder to experience great anxiety (American Psychiatric Association, 2012). They tend to do things repetitively to manipulate these thoughts and anxiety. After encountering a situation involving physical threat or harm, a person may experience PTSD (American Psychiatric Association, 2012). A person experiencing social anxiety disorder may feel overly anxious and self- conscious around other people, including being afraid they are being watched or judged by others (American Psychiatric Association, 2012). Displaying a deep emotional and irrational fear to everyday objects, places, or situations that should not produce this type of reaction is a specific phobia (American Psychiatric Association, 2012). Examples of specific phobias include fear of elevators, clowns, weather conditions, or animals (American Psychiatric Association, 2012). A person with GAD goes many days with feelings of extreme anxiety and worry, lasting at a minimum of 6 months, without very much control (American Psychiatric Association, 2012).

Depression – a serious medical problem that affects how a person feels, thinks, or acts. It is more intense and longer lasting than normal sadness (American Psychiatric Association, 2012). Signs and symptoms of depression include loss of interest or pleasure in activities (for at least 2 weeks), lack of energy, significant weight loss or gain, agitation, feelings of worthlessness or guilt, and recurring thoughts of suicide or death (American Psychiatric Association, 2012). Depression can also take different forms; major depressive disorder, dysthymic disorder (dysthymia), postpartum depression, and bipolar disorder. Major depressive disorder is potentially life –threatening and affects all aspects of life (American Psychiatric Association, 2012). Dysthymia is a milder form of depression but can last for years at a time (American Psychiatric Association, 2012). A new mother with symptoms of major depression after her baby is born may be experiencing postpartum depression, which is fairly common (American Psychiatric Association, 2012). Characteristics of bipolar disorder include dramatic mood swings from high and energetic (mania) to very low, sad, and hopelessness (depression) often with normal moods in between (American Psychiatric Association, 2012).

Schizophrenia – a severe brain disorder that usually appears in people in their 20s due to an unknown cause, although genetic factors play a role (American Psychiatric Association, 2012). Delusions or hallucinations can occur if untreated. People with schizophrenia may hear voices others do not hear and think others are plotting to harm them. Some do not recognize they have a mental illness (American Psychiatric Association, 2012). With treatment, many symptoms can be relieved but most cope with symptoms their entire lives (American Psychiatric Association, 2012).

Eating disorders – severe disturbances in eating behavior; individuals may eat very little (anorexia) or a lot and then vomit to avoid gaining weight (bulimia) (American Psychiatric Association, 2012). Some may have other patterns of eating that is disruptive to their daily functioning. Great concerns or distress about body weight and shape exist for most people with eating disorders (American Psychiatric Association, 2012).

Substance use disorders – compulsive substance use, despite harmful consequences, is characteristic of the long-term brain disease, addiction (American Psychiatric Association, 2012). Some people use drugs or alcohol to cope with symptoms of mental illness such as anxiety or depression but these substances usually make mental illness worse over time (American Psychiatric Association, 2012). Often, mental illness and substance use disorders are treated at the same time (American Psychiatric Association, 2012).

Attention Deficit/Hyperactivity Disorder (ADHD) – affects both children and adults (American Psychiatric Association, 2012). It makes learning difficult and gets in the way of forming close relationships (American Psychiatric Association, 2012). Common symptoms of ADHD include impulsiveness (acting quickly without thinking first), hyperactivity (inability to sit still or wait for a turn or fidgeting constantly), and the inability to focus on a task or pay attention (American Psychiatric Association, 2012).

Varying characteristics are highlighted among African Americans when compared to other races regarding mental illness. African Americans express symptoms of depression differently from Caucasians. African Americans are more likely to complain about the physical symptoms associated with depression, such as body aches, rather than expressing symptoms of feeling sad or evincing no interest or pleasure in normal

activities (American Psychiatric Association, 2012). Studies have shown African Americans tend to have different attitudes from Caucasians about body size and weight, but recent evidence has shown eating disorders are becoming more common among African Americans (American Psychiatric Association, 2012). Parents of African American children are reluctant about using medication to treat children with mental illnesses, leading to African American children having a lower rate of treatment for ADHD than Caucasian children (American Psychiatric Association, 2012).

The Impact and Prevalence of Mental Disorders

In the United States, mental disorders are among the most common causes of disability, thus resulting in mental illness being among the highest of all diseases causing burden in the population (United States Department of Health and Human Services [HHS], Healthy People 2020, 2011). Disease burden is the impact a health problem has on a given area using various indicators such as morbidity, mortality, and financial cost. Because of this, mental disorders are ranked among the most common causes of disability depression (HHS, Healthy People 2020, 2011). Worldwide, mental disorders account for four out of the ten leading causes of disability (Bourget Management Consulting, BMC, 2007). The most common disorders in the U.S. are anxiety and depression (HHS, Healthy People 2020, 2011). Mental disorders are associated with the prevalence, outcome, and progression of several chronic diseases. These include cancer, diabetes, and heart disease (HHS, Healthy People 2020, 2011). Among adults, 26% are living with a mental disorder and 46% will have mental disorder at some point in their lifetime (HHS, Healthy People 2020, 2011). Mental disorders can range from mild to severe. An important issue connected to African Americans is the prevalence of chronic diseases associated with

mental illness. African Americans are at a higher risk for many chronic diseases, such as diabetes and heart disease. In association with mental illnesses, progression and outcomes of these diseases can be complicated (HHS, Healthy People 2020, 2011).

Statistics show that only an estimated 17% of U.S. adults are considered to be in a state of optimal mental health (CDC, 2011). The World Health Organization estimates major depression will be the second most leading cause of disease burden in 2020 (Lauber, 2005). Mental illness not only influences people psychologically and emotionally, but also physically. A Surgeon General's report from December 1999 regarding mental health and mental illness placed emphasis on the connection between mental health and physical illness and further highlighted the relationship between mental health, physical health, and well-being. Among young people in the U.S., mental, emotional, and behavioral disorders are a serious threat (Olsson & Kennedy, 2010). The impact can cost young people and families an estimated $247 billion a year in terms of treatment and lost productivity (Olsson & Kennedy, 2010).

Knowledge and Beliefs Regarding Mental Disorders

The mere prevalence of mental disorders means adults will encounter or be in close contact with someone with a mental disorder at some point (BMC, 2007). Many of these adults who will experience this close contact will not have the skills or knowledge to provide the ailing person with the proper help. Literature suggests much of the general population is unable to identify mental disorders correctly, has a poor understanding of the underlying causal factors, and fears those who are perceived as mentally ill (BMC, 2007). Literature also suggests the general population is reluctant to seek help for mental illness, has mistaken beliefs about treatment effectiveness, and is unsure regarding how to

help others (BMC, 2007). Even those with a medical background or understanding of mental illness are pessimistic about treatment outcomes (BMC, 2007). The media may have an influence on the development of these beliefs by delivering negative messages related to mental illness (BMC, 2007).

Research has shown that knowledge and beliefs about mental disorders potentially emerge from pre-existing belief systems about health and interventions (BMC, 2007). These pre-existing beliefs have led to the development of stigmatizing attitudes (BMC, 2007). Stigma plays a large role in the general population's beliefs toward mental illness and underutilization of treatment for mental disorders. The relationship between help-seeking behaviors and attitudes is unknown, thus indicating further exploration is needed (BMC, 2007). Attitudes towards treatment can vary by age, education, and gender (BMC, 2007). Mental disorders commonly first appear in adolescence or early adulthood, a time when lack of recognition of disorders and poor knowledge of mental health is common (Wright, Jorm, Harris, & McGorry, 2007). In a survey conducted by the CDC (2011), only a fourth of young adults believed a person with a mental illness could eventually recover from the illness.

Underutilization of Mental Health Services

Research has found 50% - 60% of adults who are in need of mental health services do not receive them (Thurston & Phares, 2008). What is referred to as the "service gap" is the discrepancy between those who are in need of services and those who actually use them (Thurston & Phares, 2008). Early diagnosis and treatment are key to decreasing the burden of mental health disorders (HHS, Healthy People 2020, 2011). Most of the general population do not accept medical explanations or treatments for

mental health problems and prefer to rely on psychosocial, lifestyle, and self-help interventions (BMC, 2007). Although there is a high prevalence of mental health problems among young adults, few access treatment (Marcus et al., 2012). As a result, many do not receive adequate care.

Many African Americans, even those with health insurance, do not obtain or seek the help needed (American Psychiatric Association, 2012). A health study conducted with the 100 Black Men of America, Inc., an organization of professional men of higher socioeconomic status who mentor children and families of lower socioeconomic status, yielded interesting results among the members. Even though these men had great career success and undoubtedly had access to medical resources, they suffered highly from health disparities including the same chronic diseases associated with mental illness (Satcher & Higginbotham, 2008). These chronic diseases include lung cancer, cardiovascular disease, and diabetes (Satcher & Higginbotham, 2008).

Masuda et al. (2012) recognizes several factors that contribute to African Americans underutilization of mental health services. Some of these factors include mistrust of the provider, a racial or ethnic mismatch between the patient and the health care provider, lack of access to services, and transportation (Masuda et al., 2012). These factors range from personal choices to decisions based on the history of the treatment of African Americans.

African American History, Culture, & Mental Illness

Historically, resiliency, strength, and the development of social ties have allowed African Americans to overcome adversity and maintain somewhat of a high degree of mental health (Satcher, 2001). That strength has been equated with survival. Even though

this resiliency and strength exists, African Americans tend to underestimate the impact of mental disorders (American Psychiatric Association, 2009). African Americans experience more issues with mental illness than any other segment of the population (Satcher, 2001). African Americans are 20% more likely to report having serious psychological distress than any other segment of the population, but are also less likely to receive antidepressant prescription treatments (HHS, 2012). African Americans are just as likely to suffer from mental illness as Caucasian Americans, but for several reasons mental illnesses tend to be more severe and distressing in African Americans than for Caucasian Americans (American Psychiatric Association, 2012).

The National Alliance on Mental Illness (NAMI) identifies several issues related to African Americans and mental illness. In addition to African Americans being less likely to receive treatment, they are also more likely to be misdiagnosed (NAMI, 2009). African Americans tend to rely on family, social and religious communities for support instead of seeking professional help (NAMI, 2009). NAMI (2009) states many healthcare providers may not be aware of this issue. African Americans are exposed to other risk factors that put them at a higher risk than other ethnicities despite their representation of only 13% of the American population. These include prison (almost half of all prisoners are African American), foster care (45% of the public foster care population is African American), homelessness (40% of the homeless population are African American), and exposure to violence (more than 25% of African American children who are exposed to violence meet the criteria for posttraumatic stress disorder) (NAMI, 2009).

Many African Americans misinterpret symptoms, such as those for depression, as simply having “the blues” (American Psychiatric Association, 2009). Physical symptoms

are more often expressed by African Americans and are often not associated with a mental illness. In addition to misinterpreting symptoms, issues of distrust in the health care system and mental health stigma can lead African Americans to not seek help or seek help from non-medical sources, such as family and church (American Psychiatric Association, 2009). Misconceptions exist among African Americans concerning suicide as well. Some African Americans believe suicide is something only Caucasian people or spiritually weak people do; it is perceived as a cop-out or a cowardly move (Hucks-Bradshaw, 2012). A study examining African American college students indicated this population is at risk for depression (Stansbury, et al., 2011). The reasons are mostly related to stress, racism, lack of sleep, and lack of academic and social support (Stansbury et al., 2011).

In the eyes of some African Americans, mental illness is seen as a weakness (Hamm, 2012). Due to African American history, strength is equated with survival whereas weakness, including mental illness, is seen as the opposite. It is known that weakness does not equate death, but some do hold this belief. According to Stansbury et al. (2011), depression is viewed as a personal weakness by the African American population and is best addressed with faith and prayer rather than counseling and medication. This is consistent with previous findings by NAMI (2009). Social norms differ from culture to culture, which is critical to acknowledge (Greenberg, 2001). The role of cultural belief systems and social norms have not been readily incorporated into basic definitions of health literacy (Greenberg, 2001).

Culture is very influential in the course and experience of mental disorders (BMC, 2007). Culture, formally defined by Schein (2010), is “a pattern of shared basic

assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 18). Culture and ethnicity are separate terms. Ethnicity is a group term, defined as the enculturation of intergenerational values and beliefs from an individual's cultural heritage (Dana, 2002). Culture is embodied in the individual cultural self as a result of transformations made through acculturation and development of racial identity (Dana, 2002). Based on these definitions, it is apparent why culture plays a significant role in African Americans' thoughts, perceptions, and feelings toward mental illness, as they may have been passed down through generations. A behavior, such as seeking treatment for mental illness, may be seen as authentic in one culture but may not be viewed as authentic in another (Lin, 2006).

Cultural biases are an issue for African Americans. Among service providers in the U.S., only 2% of psychologists, 2% of psychiatrists, and 4% percent of social workers are African American (NAMI, 2009). Mainstream cultural institutions and practices are usually where negative beliefs and practices are learned (Guy, 1999). The Institute of Medicine concludes that racial and ethnic minorities, despite education, income or insurance status, receive lower quality healthcare (Barbian, 2003). Although these circumstances exist, NAMI believes with the implementation of various programs and new innovations, the rates of African Americans utilizing mental health services will increase. Culture is important in regards to mental health literacy. Significant cultural variations exist in the way people recognize, explain, relate, and experience mental disorders and treatment (BMC, 2007). For example, African Americans are more likely

to use alternative health therapies, such as herbal remedies, than Caucasians (American Psychiatric Association, 2012). Whaley (2001) gave two possible explanations of why cultural beliefs play a role in how African Americans view mental illness. One reason is fear of treatment and fear of being hospitalized and the other may be that mental health services are viewed by the African American community as a smaller version or microcosm of the larger Caucasian society (Whaley, 2001).

Historically, African Americans have not received the same treatment as other populations. In the 1960s, community mental health centers promised community treatment for those in need (Dana, 2002). African Americans were not excluded from available services, but services were underutilized due to financial, institutional, and cultural barriers (Dana, 2002). African Americans were more comfortable in churches, emergency room settings, or with community people rather than a standard doctor's office (Dana, 2002).

Health Literacy & Mental Health Literacy

Mental health literacy is derived from the concept of health literary. A definition of health literacy by an American Medical Association ad hoc committee on health literacy states health literacy is a constellation of skills, including the ability to perform basic reading and numerical tasks required to function in the health care environment (Pleasant, 2011). Kerka (2000) states literacy in relation to health includes the critical ability to interpret media messages and the capacity to access and use technology that delivers health information in addition to simply being able to read a prescription label. Overall, each of these definitions exhibits the same approach.

Previous research has shown that patients with low health literacy have poor health overall, have a poor understanding of the nature of their own health, have a lack of knowledge about medical care and conditions, do not adhere to medical regimens, have a low understanding and use of prevention, and experience premature death (Pleasant, 2011). Pleasant (2011) states a person who is health literate has the ability to improve their decision making and make better lifestyle choices. Pleasant (2011) also states these individuals are more aware of determinants of health and better equipped to engage in actions to change those determinants. Kerka (2000) describes the characteristics of a health literate person. These include health-related critical thinking and problem solving, communication skills, self-directed learning, and self-advocacy. Evidence has shown that members of minority groups are more likely to exhibit lower health literacy than others (Chervin, Clift, Woods, Krause, & Lee, 2012).

Low literacy and low health literacy are related but they are not interchangeable. Health literacy is content specific. An individual may have the ability to read and write but still struggle to comprehend unfamiliar vocabulary and concepts found in health related materials (Schwartzberg, Cowett, VanGeest, & Wolf, 2007). Being able to comprehend the information is a critical factor when making the decision to seek care or act on the information received (Schwartzberg et al., 2007). Several studies show that having a higher literacy level does not necessarily indicate an individual will respond in a desired way to health education and communication activities. For example, a study by Keenan, AbuSabha, and Robinson (2002), surveying 400 adults of which 77% were college educated, 55% were not aware of the Dietary Guidelines for Americans and either misinterpreted or misapplied the written standards.

The CDC (2011) states there is emerging evidence that positive mental health will lead to improved health outcomes (CDC, 2011). A goal of Healthy People 2020 is to improve the mental health of the population through prevention and access to appropriate and quality mental health services. Changing an individual's mental health literacy could potentially play a role in improving their mental health status. Programs are currently being developed to improve mental health literacy in other parts of the world. The World Health Organization (WHO) has an agenda devoted to enhancing mental health literacy and Canada recently developed a National Integrated Framework for Enhancing Mental Health Literacy (Ranahan, 2010).

There are several components of mental health literacy. These include 1) knowing how to prevent mental disorders, 2) recognizing when a disorder is developing, 3) knowledge of effective self-help strategies for milder problems,4) knowledge of help-seeking options and treatments available, and 5) mental health first-aid skills to support others who are developing a mental disorder or who are in a mental health crisis (Jorm, 2012). Many of these components are relevant to communities as a whole, but some are relevant to individual people specifically affected by mental disorders such as what patients need to know to manage their illness and what caregivers need to know to provide effective support to family members affected by mental illness (Jorm, 2012).

Due to the prevalence of mental disorders, most people will either develop a mental disorder or will come in contact with someone who does. Most of the time, people who experience mental or psychological problems or who are in close contact with those that do will attempt to manage the symptoms (Jorm, 2000). The attempt to manage these symptoms will be influenced by their mental health literacy (Jorm, 2000). Jorm (2000)

states activities that contributed to managing symptoms may lead to reduction in disabling symptoms and a change in mental health literacy, if successful. Jorm (2000) goes on to state those affected either personally or through close contact, are seen as the primary agents of symptom management. Professional help is seen as one of the strategies an individual may try.

There are consequences for the public related to poor mental health literacy. One consequence is it may place a limit on the implementation of evidence-based programs related to mental health care (Jorm, 2000). Recently, emphasis has been placed on the increase in the implementation of evidence-based programs (Jorm, 2000). Another consequence of poor mental health literacy is that the role of preventing and helping those with mental disorders will be left up to professionals in mental health (Jorm, 2000). Professionals in the field tend to be overworked because of the prevalence of mental disorders and underfunding of mental health care, and therefore tend to focus on those with more severe or chronic issues (Jorm, 2000). Jorm (2000) believes if there are to be gains in prevention, early intervention, self-help and support of others in the community, then mental health literacy is needed to provide basic knowledge and skills.

Research conducted by Jorm et al. (2006) has determined mental disorders are not well recognized by the public. There is a gap between public and professional beliefs about treatment, stigma is a barrier to help-seeking, mental health first-aid skills are deficient, and there are several types of interventions that can improve mental health literacy. According to research by Jorm et al. (2006), what still needs to be determined is how to reduce stigma, whether improved mental health literacy changes people's help

seeking behavior, how preventive action and early intervention can be increased, and whether mental health literacy can improve population mental health.

Research has shown that individuals literate in mental health are likely to seek help for mental illness themselves, and recommend professional help to family and friends who may experience symptoms (Stansbury, Wimsatt, Simpson, Martin, & Nelson, 2011). Mental health literacy is also seen as a determinant of help-seeking (Goldney & Fisher, 2008). The propensity to share and recommend professional help to family and friends correlates with research findings for health literacy. Freedman, Miner, Echt, Parker, and Cooper, (2011) concluded that the reach of health literacy information being taught in adult education classrooms extends further than individual students; it also reaches their friends and families. Freedman, et al. (2011) state individuals receiving health-related information often shared what was learned with friends and family members, thereby reaching more than just those who participated in a course.

According to BMC (2007), researchers indicate that mental health literacy has more than a single dimension, and is a representation of knowledge and beliefs about mental disorders that surface as a result of pre-existing beliefs. Mental health literacy is a relatively new area of research. A study by von dem Knesebeck, Mnich, Daubmann, Wegscheider, Angermeyer, Lambert, Karow, Harter, and Kofahl (2013) indicated few studies analyze the relationship between knowledge and belief about mental illness and education or mental health literacy. Stansbury et al. (2011) states previous studies examining mental health literacy have found that individuals who are literate in mental health are likely to seek treatment for themselves and recommend help for family members or friends who may be in need. Evidence exists that suggests people who have

information about mental illness may be less likely to stigmatize and be more supportive of those with mental health problems (BMC, 2007).

Speller (2005) conducted a study comparing knowledge and opinions of mental illness between Asian Americans and Caucasian college students. This study sought to determine if limited mental health literacy served as a barrier to seeking appropriate help (Speller, 2005) and whether attitudes toward mental health services and adherence to Asian cultural values play a role in help-seeking behaviors. The results indicated, with certain mental disorders, incorrect identifications were made and ethnic and cultural differences can perpetuate lack of knowledge and stigma toward mental illness (Speller, 2005). Another study conducted by Cheslock (2005) explored the mental health literacy of first- and third-year medical students assessing their knowledge and beliefs about mental disorders. The results of this study identified several deficiencies in the knowledge and beliefs of medical students (Cheslock, 2005). Cheslock (2005) stated future studies surrounding mental health literacy are needed with various groups.

A study by Sentell and Ratcliff-Baird (2003) using the Beck Depression Inventory found that even those with higher literacy had problems understanding mental disorders. Comprehension of mental health disorders may be related to an individual's level of mental health literacy and not necessarily to their education level. It has been found that it is important for an individual to be able to recognize a disorder in themselves and in others in order to reduce the delay of seeking appropriate treatment (BMC, 2007). The Surgeon General suggested employers provide education, outreach, and training to employees facing mental health problems in conjunction with employment-based health insurance coverage and group health plans (HHS, National Prevention Council, 2010).

Previous studies have shown there is a need for educational programs related to mental health in the African American community. Stansbury et al. (2011) indicated one-third of the African American respondents in their study indicated mental illness is seen as a weakness in the African American community, but respondents also stated educational programs that bring the prevalence and causes of mental illness to the forefront in African American communities could increase understanding and reduce stigma. Gary (2005) proposes ethnic minorities suffer from double stigma, being a member of their minority group and suffering from a mental illness. Because of this, they often do not seek treatment resulting in preventable and treatable mortalities and morbidities (Gary, 2005). Gary (2005) suggests that education surrounding mental illness needs to be improved for the individuals, families, and the public.

Theoretical Framework

Transformative or Transformational Learning Theory and the Theory of Reasoned Action (TRA) both served as guides for this study. These two theories are similar as each observes the behavior and the likelihood of performing a behavior, while also taking into consideration attitudes and beliefs. Transformational learning not only seeks to transmit new knowledge, skills, and ways of thinking, but it also serves to expose the learner to a new way of viewing and examining the world. Mezirow (1997) states “We have a strong tendency to reject ideas that fail to fit our preconceptions, labeling those ideas as unworthy of consideration – aberrations, nonsense, irrelevant, weird, or mistaken” (p. 5). In transformative learning, a transformation occurs in an individual’s beliefs or attitudes or in their entire perspective (Merriam et al., 2007). These facets lend to the connection of this theory with mental health literacy. If adults have already formed their ideas based

on previous experience, it is more likely they will not seek treatment which may affect the state of their mental health.

The goal of transformative learning is to move learners to a more inclusive, self-reflective, and integrative frame of reference (Mezirow, 1997). Mezirow outlined an eleven-phase process for transformative learning. The eleven-phases of the process are: disorienting dilemma, self-examination, critical assessment of the assumptions, recognition of discontent and identification with similar others, exploration of new options, planning, acquiring knowledge for plans, experimenting with new roles, building confidence, reintegration, and recognition of relationships (Mezirow, 2003). Critical reflection and discourse are used throughout these phases.

A transformation could be made in an individual's mindset through the increase of their mental health literacy, thus leading to an increase in their knowledge about mental health, a change in attitude, and ultimately an increase in the number of individuals in a state of optimal mental health. Although it is not the goal of this study to increase mental health literacy, knowing what level of literacy an individual has may lead to an understanding that a transformation is needed. Authors such as Baumgartner (2011) and Phillipi (2010) have also connected transformative learning theory and healthcare. Baumgartner (2011) cited several studies that used transformative learning to explore the meaning-making process of those diagnosed with a chronic illness. Phillipi (2010) discusses integrating transformational learning throughout the healthcare process when dealing with discourse and action.

The TRA is concerned with the relationship between beliefs, attitudes, and behaviors (Fishbein, 1967). There are several constructs of the TRA. These include:

behavioral intention, attitudes, behavioral belief, the evaluation of the behavioral belief, subjective norm, normative belief, perceived behavioral control, control belief, and perceived power (Redding et al., 2000). The eventual goal of the TRA is predicting behavior. Although research involving the TRA is often overlooked, according to Redding et al. (2000) the TRA is still useful in situation-specific attitude and intention measures, which would apply to this study. According to the TRA, behavioral intention is seen as a special type of belief and is indicated by the individual's subjective perception and the probability that he or she will perform behaviors (McKenzie & Smeltzer, 1997). Attitudes, self-efficacy, and subjective norms are three major variables influencing intention. This theory is relevant when considering the mental health literacy of adults as these three variables may influence whether or not they seek treatment.

Beliefs about behavior influence attitudes (Redding et al., 2000). In terms of behavioral beliefs, if an individual holds strong beliefs that a positive outcome will occur as a result of their behavior, then the individual will have a positive attitude toward the behavior (Montano & Kasprzyk, 2002). This can also result if strong beliefs about a negative outcome are present. The TRA can provide guidance for the development of interventions to target and change beliefs and the value placed on them which can, in turn, affect attitude and the subjective norm, leading to a change in intention and behavior (Montano & Kasprzyk, 2002). The TRA has been used to successfully predict and explain a wide range of health behaviors and intentions, including the use of health care services (Montano & Kasprzyk, 2002).

According to a review of the current literature, neither transformative learning nor the TRA have been employed to study mental health literacy. Transformative learning

has been used in studying various chronic illnesses, such as HIV, rheumatoid arthritis, and stroke, but not mental illness (Baumgartner, 2011). Masuda, Anderson, and Edmonds (2012) suggest that, with ideas derived from Ajzen and Fishbein, exploring factors related to help-seeking attitudes may facilitate the understanding of utilization of professional mental health services as attitudes about behavior are associated with actual engagement in the behavior. Change in health status and not healthcare overall has been explored within adult education literature (Phillipi, 2010). It is healthcare and not health status that can begin transformational learning, and according to Phillipi (2010), has been less explored. Both of these well-cited and often debated theories provide the foundation that guided this study. Previous research has indicated attitudes, beliefs, previous experiences, the perceptions of those closest to the individual and prior knowledge, play a role in how adults view mental illness. Both of these theories provide guidance in researching these areas.

From the preliminary review of the literature, the theories used to guide this study have not been connected with mental health literacy. Each of these theories has been constantly debated in literature. The results of this study could potentially add to these debates, as they have not been applied in a study related to mental health literacy. Theories are constantly being updated and reanalyzed, especially in the adult education field.

Schecter and Lynch (2011) addressed the need for a theory related to health learning and adult education. They studied two different theories that can relate to health learning. These are a situated cognitive perspective and learning within a community of practice (Schecter & Lynch, 2011). Their article demonstrates how theories are

constantly being applied to different research areas. Although there is not intent to develop a new theory, the results have a potential to add to literature surrounding transformative learning and the Theory of Reasoned Action.

In addition to these guiding theories, this study also examined the sociocultural perspective. The sociocultural view is drawn from Vygotskian theories of learning and development (Alfred, 2002). These theories emphasize that learning occurs within a social world. Sociocultural approaches are based on the idea that activities take place in cultural contexts, mediated by language and other symbol systems, and are best understood when observed in their historical development (John-Steiner & Mahn, 1996). The sociocultural prospective states educators must seek an understanding of the cultural worlds in which individuals have grown and developed, how they interpret who they are in relation to others, and how they have learned to process, interpret, and encode their worlds (Alfred, 2002). The relationship between literacy and culture must be a main component of any analysis of literacy and the individual (Ferdman, 1990).

Ferdman (1990) states every individual maintains a cultural identity. Cultural identity is an image of the behaviors, beliefs, values, and norms deemed appropriate to members of the ethnic group in which the individual belongs (Ferdman, 1990). The cultural identity includes a combination of cultural features that help to define and characterize the group (Ferdman, 1990). Cultural identity is a source of tools that can empower, enrich, and endow individuals with dignity, history, meaning, and group integrity (Dana, 2002).

The sociocultural view observes resources, values, and practices essential in a community and noting how they validate some and marginalize others (Alfred, 2002).

When an ethnic group senses its cultural features compare favorably with other groups, it will hold more positive images of itself; but if central features are viewed negatively in the larger society, the group will incorporate a negative factor into its self-evaluation (Ferdman, 1990). When studying mental health literacy and what contributes to lower mental health literacy, culture must be included. The sociocultural view embraces individual, social, and cultural dimensions of learning. An individual's perception of themselves in relation to their ethnic group and larger society can change by becoming and ultimately being literate (Ferdman, 1990).

Connection to Adult Education

This study has the potential to provide relevance for theory development and adult education practice. The promising approach of incorporating health literacy into adult education has the potential to increase the health equity of people who face racial/ethnic health disparities (Chervin, et al., 2012). One of the most important determinants of health is literacy (Gillis, 2004). Although the goal of health education is to provide assistance in making appropriate choices for health, the current structure of the United States healthcare system may not appeal to adult learners, meaning it is not set up to address larger health and developmental needs (Phillipi, 2010). Adults need to know about health issues in order to effect changes in their behaviors and their health status (Phillipi, 2010). The education field is becoming more diverse and adult educators are in a position to serve as resources to adult learners and provide links to reliable health information and help build skills (Diehl, 2011). This study has the potential to add to the expanding literature on health literacy and contribute a new perspective that has not received attention in the field.

Since mental health literacy is developed from the concept of health literacy, many of the same tenets can be applied. The definition of health literacy has expanded over the last few years, bringing with it a broader conceptualization of general literacy (BMC, 2007). This broader context has an influence on the overall health and well-being of populations (BMC, 2007). The incorporation of health literacy into adult education programs varies. Skills for health literacy can be delivered at the systems, organizational, or classroom level (Diehl, 2011). Diehl states there are various models and curricula that promote health literacy skills among adult learners.

There are examples of studies from the field of adult education related to health literacy. One example is an article by Hsu (2008) that studied the health literacy of adults based on the results of the 2003 National Assessment of Adult Literacy data. The results indicated those with a GED or high school equivalency have a higher average health literacy score than non-high school graduates across the ten demographic and socioeconomic backgrounds evaluated. The results for GED/high school equivalency and high school graduates were equivalent. Another example is a study by Freedman et al. (2011) which reported observations and interviews with students and instructors in an adult education health literacy class explored the efficiency of using adult education courses to teach functional health literacy skills. Several authors believe the adult education classroom is a prime location for the teaching of health literacy.

Hill (2011) edited a volume titled *Adult Education for Health and Wellness* that included several articles related to health and its place in adult education. If these special efforts are being made in the field, it provides further justification for the concept of mental health literacy to be studied and included in future research. Adults are faced with

various issues on a daily basis that influence their mental health. According to BMC (2007), mental health literacy, at the most basic level, is connected to general literacy. Inclusion of mental health information or a person with a mental illness presenting factual information concerning mental disorders in adult education programs has shown improvements in attitudes (BMC, 2007). Improving the literacy of adults, including mental health literacy, may have noticeable benefits in reducing psychological strain and promoting mental health (WHO, 2004).

Zarcadoolas, Pleasant, and Greer (2005) propose a multi-dimensional model for understanding and improving health literacy. The four broad domains identified in the model are fundamental, scientific, civic, and cultural domains (Zarcadoolas et al., 2005). This study related to mental health literacy fits into these four domains. The fundamental domain involves reading, writing, communicating, and listening to health information (Novitzky, 2009). The scientific domain involves research of facts and knowledge related to health and an understanding of science and scientific uncertainty (Novitzky, 2009). The civic domain includes navigating power relationships which includes self-efficacy, media literacy, and social capital (Novitzky, 2009). The cultural domain involves awareness of different cultural interpretations and having the ability to communicate across cultures (Novitzky, 2009). The study of this domain is a part of adult education literature.

Mental health literacy has not been readily studied in the field of adult education. Increasing health-related knowledge alone may not be enough to spark a change because beliefs and behaviors are difficult to alter, but if it improves conditions it can provide

adults with knowledge to see the consequences of their behavior and have the ability to make better choices (Schecter & Lynch, 2011).

Bartlett, Travers, Cartwright, & Smith (2006) address how misconceptions regarding mental health can lead to stigma towards people with a mental illness. There is the potential of furthering research related to attitudes and beliefs concerning mental health. Also, health educators have a role in being advocates for adult learners in the 21st Century (Tappe & Galer-Unti, 2001). The results of this study could potentially add to the efforts to advocate for mental health and mental health literacy. Adults deal with issues on a daily basis that may potentially impact their mental health.

Mental health literacy can be viewed as a form of prevention for mental disorders. WHO (2004) states effective prevention can aid in changing perceptions related to mental health thus changing the way mental disorders are looked upon in society. WHO (2004) also states collaboration is necessary between mental health and other sectors to make prevention a reality. Adult education is a logical fit.

CHAPTER III

METHODOLOGY

A quantitative approach was used for this study. There are instruments that have already been developed and were tailored for this study to assess mental health literacy along with attitudes and beliefs related to mental illness and help seeking behavior. Young adult college-educated African Americans were chosen for this study because recent research indicates this segment of the population is least likely to receive mental health services compared to their Caucasian American counterparts (Broman, 2012). An assessment of young adults in this population may explain if their level of mental health literacy is related to these behaviors.

Research Questions and Hypothesis

The goal of this study was to determine if mental health literacy in young college-educated African Americans is related to their attitudes toward seeking help for mental illness, as well as their attitudes and beliefs toward mental illness overall as compared to Caucasian Americans. It was hypothesized that low mental health literacy contributes to attitudes surrounding help-seeking as well as attitudes and beliefs toward mental illness.

This study attempted to answer the following research questions:

- Is there a relationship between mental health literacy and attitudes surrounding help-seeking behaviors?
- Is there a relationship between mental health literacy and attitudes and beliefs related to mental illness?
- Is there a relationship between demographics such as race and education and mental health literacy?

The research questions tie to the guiding theories of this study by examining behaviors, beliefs, and attitudes, which are the basic tenets of each of the theories.

Participants

The age category for young adults was delimited to be between 21 and 34 years. College educated will constitute having graduated from a four-year university or a two-year community college. The sampling techniques employed for this study included convenience and snowball sampling. Participants were recruited by requests sent to various groups and organizations, including but not limited to civic organizations, graduate school organizations, professional organizations, and social clubs. Participants were given the option to pass information about the questionnaire to others who are a part of the target population and may have been interested in participating in the study. Participation was voluntary. Limitations of using these sampling procedures include having no evidence that the sample is representative of the population the results are being generalized to, and that it may yield low external validity and high external validity. Gender, college major, degree received, and current city and state of residence were collected for each participant as part of the demographics. Participants could reside in any location within the United States.

Study Design

The survey methodology was used for this study. In the case of this study, the goal was to find if a relationship existed between mental health literacy, attitudes, and beliefs toward mental illness, and help-seeking behaviors. Data were analyzed to observe relationships among each of these variables, including demographic variables. An advantage of using survey methodology is data can be gathered from large numbers of

people. Variables that were evaluated include responses from the mental health literacy assessment and the help-seeking scale as well as demographics.

Instrument

A questionnaire using vignettes related to various mental disorders was used. The instrument was adapted from a questionnaire developed by Link, Phelan, Bresnahan, Stueve, and Pescosolido (1999), included in the General Social Survey (1996). The General Social Survey has been conducted since 1972 and is administered by the National Opinion Research Center at the University of Chicago (Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999). The purpose of the survey is to monitor the attitudes, beliefs, and behavior of Americans on critical social issues and has been modified in recent years to include a set of topic modules of particular policy interest (Pescosolido et al., 1999). The MacArthur Mental Health Module "Problems in Modern Living" was developed in 1996 to document the public's view of individuals with mental health problems targeting recognition and knowledge of mental health problems, stigma, appropriate treatments, and financial responsibility (Pescosolido et al., 1999). In response to survey researchers' arguments that general questions related to mental illness are less likely to elicit discriminating public responses, these researchers developed a set of vignettes based on criteria for diagnosing schizophrenia, major depressive disorder, alcohol dependence, and drug dependence from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (Pescosolido et al., 1999). Key characteristics of the person across vignettes were randomly assigned to address socio-demographic influence (Pescosolido et al., 1999).

The present study used the developed vignettes addressing alcohol dependence, major depressive disorder, schizophrenia, and drug dependence. A study by Cheslock (2005) suggests that the use of vignettes depicting various mental disorders is sufficient to assess mental health literacy of individuals in various groups, genders, cultures, and ethnicities. The instrument consisted of four vignettes with six content questions. The four vignettes were as follows (The diagnosis the vignettes illustrate were not labelled on the questionnaire):

- Major Depressive Disorder: James is a 34 year old African American man who has completed a Master's Degree in Electrical Engineering. For the last two weeks James has been really down. He wakes in the morning with a flat, heavy feeling that sticks with him all day long. He isn't enjoying things the way he normally would. In fact, nothing seems to give him pleasure. Even when good things happen, they don't seem to make James happy. He pushes on through his days, but it is really hard. The smallest tasks are difficult to accomplish. He finds it hard to concentrate on anything. He feels out of energy and out of steam. And even though James feels tired, when night comes he can't get to sleep. James feels pretty worthless and very discouraged. James' family has noticed that he hasn't been himself for about the last month and he has pulled away from them. James just doesn't feel like talking.
- Schizophrenia: Jaime is a 33 year old Caucasian woman who is a successful attorney. Up until a year ago, life was pretty okay for Jaime. But then things started to change. She thought that people around her were making disapproving comments and talking behind her back. Jaime was convinced that people were

spying on her and that they could hear what she was thinking. Jaime lost her drive to participate in her usual work and family activities and retreated to her home, eventually spending most of her day in her room. Jaime became so preoccupied with what she was thinking she skipped meals and stopped bathing regularly. At night, when everyone else was sleeping, she was walking back and forth in her room. Jaime was hearing voices even though no one else was around. These voices told her what to do and what to think. She has been living this way for six months.

- Drug Dependence: Sara is a 22 year old woman of Hispanic descent and a recent college graduate working in banking. A year ago, Sara sniffed cocaine for the first time with friends at a party. During the last few months, she has been snorting it in binges that last several days at a time. She has lost weight and often experiences chills when binging. Sara has spent her savings to buy cocaine. When Sara's friends try to talk about the changes they see, she becomes angry and storms out. Friends and family have also noticed missing possessions and suspect Sara has stolen them. She has tried to stop snorting cocaine, but can't. Each time she tries to stop, she feels tired, depressed, and is unable to sleep. She lost her job a month ago, after not showing up for work.
- Alcohol Dependence: Kevin is 28 year old African American male who is a dedicated social worker. During the last month Kevin has started to drink more than his usual amount of alcohol. In fact, he has noticed that he needs to drink twice as much as he used to to get the same effect. Several times he has tried to cut down or stop drinking but he can't. Each time he has tried to cut down, he

became very agitated, sweaty, and he couldn't sleep, so he took another drink. His family has complained that he is often hung-over and has become unreliable, making plans one day, and canceling them the next.

Participants were asked to read each of the four vignettes and immediately answer six questions. The first question asked the participant to rate the seriousness of the problem of the individual in the vignette (1 = Very Serious, 4 = Not Serious at All). The next question asked if they believe the individual in the vignette has a mental illness, and if yes, to indicate what kind of mental illness they think it may be (open-ended response). Participants ranked possible causes of the individual's situation (1 = Very Likely, 4 = Not at All Likely). Participants were asked how likely they believed the individual's situation will improve on its own and how likely the individual's situation will improve with treatment (1 = Very Likely, 4 = Not at All Likely). Finally, participants indicated what they believed the individual should do from options given (Yes, No, Don't Know) and ranked those options (1 – 11). Key characteristics of the individuals in the vignettes were randomly assigned, such as gender, age, race and education. Wording of vignettes and scales were established by the original authors. Some questions from the original questionnaire were removed to shorten the number of items and to remove items that were not of interest to the current study.

A second part of the questionnaire included the Attitudes toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF) (Fischer & Farina, 1995). The ATSPPHS-SF was adapted from Fischer and Turner's (1970) original Attitudes toward Seeking Professional Psychological Scale (ATSPPHS). The ATSPPHS consisted of 29 items measuring four factors: recognition of personal need for

professional psychological help, tolerance of the stigma associated with psychological help, interpersonal openness regarding one's problems, and confidence in the mental health professional (Fischer & Turner, 1970). Fischer and Farina (1995) shortened the original 29 items to ten items to improve the reliability and validity of the scale. Once retested, the scale demonstrated an adequate internal consistency (Fischer & Farina, 1995). The revised scale consists of ten items, on a four-point scale (1 = Disagree, 4 = Agree). Examples of items include: "The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts" or "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." Items for both the vignettes and the ATSPPHS-SF used a Likert-type scale. Both instruments were administered through Qualtrics. A third part of the questionnaire included nine questions asking participants for demographic information. The Demographics collected included gender, race/ethnicity, age, area of study/major, highest degree obtained, current city and state of residence, total household income, marital status, and religious affiliation.

These instruments also had items that tested for the guiding theories of this study. Transformational learning, as defined by Mezirow (1997) is the process of changing an individual's frame of reference. Included in the frames of reference are concepts, feelings, values, associations, and conditioned responses adults have acquired over time through experiences and have defined who they are (Mezirow, 1997). Ultimately, the frames of reference define how an adult may react in certain situations. The responses from the vignettes as well as the ATSPPHS-SF will test these frames of reference in relation to transformational learning. The Theory of Reasoned Action (TRA) observes

individualized motivational factors as determinants of performing a specific behavior (Montano & Kasprzyk, 2002). The TRA was developed to understand the relationship between behavior and attitudes (Ajzen & Fishbein, 1980). The responses from the ATSPPHS-SF sought to measure attitudes, behaviors, and the intention to perform certain behaviors, thus testing for the TRA.

Permissions for Instruments

The questionnaire developed by Link, Phelan, Bresnahan, Stueve, and Pescosolido, titled the MacArthur Mental Health Module "Problems in Modern Living" (1996) as part of the General Social Survey (1996), is considered public record and special permission is not necessary. This information was provided by T.W. Smith (personal communication, May 21, 2014), Director of the General Social Survey at the National Opinion Research Center. The results of this study will be shared with the developers of the survey as requested by Dr. Smith. According to the authors of the Attitudes toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF), Fischer and Farina (1995), the scale is useful for relevant studies and should only be used in research. Fischer and Farina (1995) also stated researchers may use this scale and do not need to contact the authors for permission.

Reliability/Validity

The MacArthur Mental Health Module appeared as part of the General Social Survey in 1996, which fields two independent, representative samples every two years (Pescosolido et al., 1999). The mental health questions were included in one of the samples. Before administering the instrument as part of the General Social Survey, Link et al. (1999) conducted several pre-tests. For the sample who were administered the

questionnaire on which the mental health questions were included, the response rate was 76.1%. Based on their analyses, the researchers determined the vignettes generated predictable patterns of response, suggesting the measures have construct validity (Pescosolido et al., 1999). According to B. Pescosolido (personal communication, February 18, 2015), psychometric properties have not been collected on the vignettes and survey instruments and this is why reliability information is not available. Content validity in line with DSM-III criteria was confirmed by a psychiatric expert who assisted with the vignette development for the MacArthur Mental Health Module (B. Pescosolido, personal communication, February 18, 2015). Since then, the vignettes have been widely used in many settings confirming they have good reliability and validity (B. Pescosolido, personal communication, February 18, 2015).

The original Attitudes toward Seeking Professional Psychological Help Scale (ATSPPHS) developed by Fischer and Turner (1970) was tested several times for consistency. However, in future studies, the subscales used to measure certain dimensions lacked internal consistency (Fischer & Farina, 1995). To remedy this issue, Fischer and Farina (1995) developed a shorter scale for the attitude construct. After testing, ten items reflected the essential construct of attitude toward seeking professional help (Fischer & Farina, 1995). These ten items had an internal consistency of .84 which is comparable to what had been obtained by Fischer and Turner (1970) for their full scale (.83 and .86 in two samples). The construct validity of the ATSPPHS-SF is displayed in the results found by Fischer and Farina (1995). In addition to these results, significant point-biserial correlations were found between those who had sought help and those who had not

(overall, $r = .39$, $p < .0001$, women, $r = .24$, $p < .03$, and men, $r = .49$, $p < .0001$) (Fischer & Farina, 1995).

Procedures

Permission was obtained from the Institutional Review Board at the University of Southern Mississippi to conduct the study. Once permission was received, the author contacted various groups and organizations as mentioned under subsection "Participants." An email correspondence was sent to possible participants with information on how to access the online questionnaire. Participants were then able to forward this information to others who may be interested in participating in the study. Prior to completing the questionnaire, each participant was given a brief synopsis of the purpose of the study and informed that his/her participation is voluntary and anonymous. Questionnaires required approximately 15 to 20 minutes to complete. Participants were directed to resources and information related to mental health upon completion.

Data Analysis

Data were collected and later analyzed by the author using the statistical program SPSS. Statistical procedures included were descriptive statistics, chi-square, t-test, MANOVA, and correlational analyses. An independent samples t-test was used to examine the ethnic differences in attitudes toward seeking professional psychological help. A correlational analysis was used to determine the hypothesized relationships.

CHAPTER IV

ANALYSIS OF DATA

The primary purpose of this study was to assess the levels of mental health literacy among young college-educated African Americans to determine if there is a relationship between their mental health literacy and their attitudes and beliefs toward mental illness and seeking help for mental illness as compared to their Caucasian American counterparts. Results of this study are presented in this chapter and begin with an analysis of the demographic characteristics of the individuals who participated in the study followed by the handling of missing data and reliability coefficients. Next, descriptive statistics of vignettes and the Attitudes toward Seeking Professional Psychological Help Scale-Short Form are presented. Presented last are ethnic differences in attitudes toward seeking professional help; correlational findings are presented on the relationship among ethnicity, help seeking attitudes, and responses from vignettes.

Demographics

Participants completed nine demographic questions including their gender, race/ethnicity, age, area of study/major in college, highest degree obtained, current city and state of residence, total household income, current marital status, and religious affiliation. The sample consisted of the 118 replies, with some missing data.

For gender, females outnumbered males with 75.4% of the participants being female (N = 49) and 24.6% of the participants being male (N = 16). The remainder of the participants (N = 53) did not identify their gender. For race/ethnicity; 52.3% of the sample identified as African American (N = 34) and 47.7% of the sample identified as

Caucasian (N = 31). The remainder of the participants (N = 53) did not identify their race/ethnicity.

The age range pre-defined for this study was 21 – 34 years of age. Respondents' ages ranged from 21 to over 35. Age was divided into four ranges, 21 – 25, 26 – 30, 31 – 34, and 35 and over. The age range of 31 -34 was most represented by the participants. Areas of study and college major were divided into seven categories according to the Digital Commons Three-Tiered List of Academic Disciplines. The categories were Arts and Humanities, Business, Education, Medicine and Health Sciences, Physical Sciences and Mathematics, and Social and Behavioral Sciences. The Medicine and Health Sciences category was most represented by the participants.

The study was delimited to individuals who had graduated from a four-year university or a two-year college. Master's/Specialist degree was most represented by the participants. The participants resided in various locations across the U.S., but the majority were from the state of Mississippi (N = 58). Other participants resided in Memphis, TN, Norfolk, VA, Philadelphia, PA, Taylors, SC, and Washington, D.C. (N = 5). This variable was not used in the analysis due to the homogenous nature of the responses.

There were eleven different categories for income level. A total yearly household income between $40,000 and $49,000 was most represented by the participants. For marital status, single, never married was most represented. For religious affiliation, Protestant Christian was identified most by the participants. Responses listed as "other" for religious affiliation included Agnostic, Baptist, Christian, COGIC, no specific religious affiliation, and non-denominational. Table 1 displays the demographic characteristics of the sample.

Table 1

Demographic Characteristics of the Sample

Characteristic	*N* (N = 118)	Percentage %
Gender		
Male	16	26.4
Female	49	75.4
Not identified	53	
Race/Ethnicity		
African American	35	52.3
Caucasian	31	47.7
Not identified	53	
Age		
21-25	8	12.3
26-30	21	32.3
31-34	23	35.4
35 and over	13	20.0
Not identified	53	
Area of Study/College Major		
Arts and Humanities	4	6.3
Business	13	20.6
Education	7	11.1
Medicine and Health Sciences	21	33.3
Physical Sciences and Mathematics	3	4.8
Social and Behavioral Sciences	15	23.8
Not identified	55	
Highest Degree Obtained		
Associate's degree	8	12.7
Bachelor's degree	23	36.5
Master's/Specialist	2	42.9
Ph.D. or JD	5	7.9
Not identified	55	
City and State of Residence		
Mississippi	58	92.1
Other States	5	7.9
Not identified	55	

Table 1 (continued).

Characteristic	*N* (N = 118)	Percentage %
Total Yearly Household Income		
Below $20,000	6	9.4
$20,000 - $29,000	4	6.3
$30,000 - $39,000	8	12.5
$40,000 - $49,000	10	15.6
$50,000 - $59,000	6	9.4
$60,000 - $69,000	6	9.4
$70,000 - $79,000	9	14.1
$80,000 - $89,000	5	7.8
$90,000 - $99,000	1	1.6
$100,000 - $149,000	7	10.9
More than $150,000	2	3.1
Not identified	54	
Marital Status		
Single, Never Married	27	42.2
Married	31	48.4
Separated	3	4.7
Divorced	3	4.7
Not identified	54	
Religious Affiliation		
Protestant Christian	28	44.4
Roman Catholic	8	12.7
Evangelical Christian	2	3.2
Muslim	1	1.6
Buddhist	1	1.6
Other	23	36.5
Not identified		

Missing Data and Reliabilities

Data was imputed using multiple regression to handle missing values. Linear trend at point was used for the method. The percentage of missing data ranged from 1.5% to 20%. The higher percentages were related to items that required the participant to rank options for treatment. Some participants may have skipped some of the options or could not decide on a ranking for the option. A reliability analysis was conducted on the items

from the ATSPPHS-SF using Cronbach's alpha. The results were slightly below the cutoff, Cronbach's $\alpha = .603$, making the scale not very reliable. The removal of two items would improve the reliability of the scale: "There is something admirable in the attitude of a person who is willing to cope with his or her conflicts or fears without resorting to professional help" (corrected item – total correlation = -.285) and "A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help" (corrected item – total correlation = .426). After removing these two items, the scale reflected a high reliability, Cronbach's $\alpha = .825$. These items were not used for analysis.

Responses to Vignettes

In order to assess the participants' knowledge and beliefs about each of the conditions (major depressive disorder, schizophrenia, drug dependence, and alcohol dependence), respondents were asked to identify and label the problem in each vignette. Participants were asked how serious they consider the individual's problem to be (1 = very serious, 2 = somewhat serious, 3 = not very serious, or 4 = not at all serious), whether the individual has a mental illness and if so what kind of mental illness might it be. Next, participants were asked what likely caused the problem from a list of choices, how likely is it to improve on its own (1 = very likely, 2 = somewhat likely, 3 = not very likely, and 4 = not at all likely), and how likely the situation will improve with treatment (1 = very likely, 2 = somewhat likely, 3 = not very likely, and 4 = not at all likely). Finally, participants were presented with a list of options for treatment and asked to rank the order of those options. After reading and answering questions about the vignettes, participants were asked to complete items from the Attitudes toward Seeking

Professional Help Scale – Short Form (ATSPHS-SF). Participants were asked to provide their degree of agreement for each statement (1 = disagree, 2 = partly disagree, 3 = partly agree, and 4 = agree). The total sample consisted of 118 replies; of these 65 were complete. Of the complete questionnaires, 13 were out of the defined age range. To save all data, a parallel analysis was conducted to compare the entire sample against the 52 complete replies that met all defined parameters of the study.

Major Depressive Disorder Vignette

For the major depressive disorder vignette, 55.7% of the participants responded the individual's problem was "very serious;" 41.5% of the participants responded the individual's problem was "somewhat serious;" and 2.8% of the participants responded that the individual's problem was "not very serious." When asked if the individual in the vignette had a mental illness, 73.3% of the participants responded "yes;" 15% responded "no," and 11.7% responded "don't know/not sure." A majority of the participants also correctly identified the problem being experienced by the person in the vignette as depression or some form of depression, 92.3%.

Participants examined six possible causes for major depression. Table 2 gives the percentage of participants who responded "very likely" to each cause, along with the mean and standard deviation. The item with the highest amount of endorsement by participants for the cause of individual's major depressive disorder was "stressful circumstances in his life" with 72% responding "very likely" to this choice. Other items for the cause of major depressive disorder that received lower rates of endorsement were "God's will" with 5.2% and "the way he was raised" with 4.2% of participants responding "very likely" to these factors.

Table 2

Participants Beliefs about Causes of Major Depressive Disorder

Statement	*N*	Mean	Standard Deviation	Percentage Responding "Very Likely"
Stressful circumstances in his life	100	1.31	.526	72.0
A chemical imbalance in the brain	99	1.88	.812	33.3
A genetic or inherited problem	98	2.33	1.023	24.5
His own behavior	96	2.35	.846	14.6
God's will	97	3.28	.875	5.2
The way he was raised	96	2.85	.808	4.2

Participants responded that it was "not very likely" the individual's situation would improve on its own with 59.2% selecting this option. Some of the participants, 28.6% responded it was "somewhat likely" the situation would improve on its own; 9.2% responded "not at all likely;" and 3.1% responded "very likely." When asked how likely the individual's situation would improve with treatment, 64.3% responded "very likely." Other participants responded "somewhat likely," 32.7%, "not very likely," 2%, and "not at all likely," 1%.

Participants were asked to select "yes," "no," or "don't know" for several treatment options. Table 3 lists the percentage of participants who responded "yes" for each treatment option. The highest item for endorsement for participants for treatment of major depressive disorder was "talk to family and friends about it," with 97.8% of participants answering "yes" for this option. The treatment options "go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for

help" and "talk to a minister, priest, rabbi, or other religious leader" received 91% and 84.3% "yes" responses, respectively. "Take non-prescription medication, like over the counter sleeping pills" received the lowest number of positive responses at 6.7%.

Table 3

Participants Beliefs about Treatment of Major Depressive Disorder

Statement	% of Participants Responding "Yes"
Talk to family and friends about it	97.8
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	91.0
Talk to a minister, priest, rabbi, or other religious leader	84.3
Go to a general medical doctor for help	68.9
Go to a psychiatrist for help	68.5
Join a self-help group where people with similar problems help each other	67.4
Go to a spiritual or natural healer for help	42.7
Take prescription medication	41.6
No treatment	12.4
Check into a mental hospital	9.0
Take non-prescription medication, like over the counter sleeping pills	6.7

Participants were also asked to rank order types of treatment from highest to lowest for major depressive disorder, indicating what the person should do. Table 4 shows the percentage of participants who ranked each treatment option as their first choice. "Go to a therapist or counselor, like a psychologist, social worker, or other mental

health professional for help" was the first choice of the participants with the highest percentage, about 33%. Almost 31% of participants chose "talk to family and friends about it" as their first choice of treatment for major depressive disorder, out of 11 possible options. Only about 1% of participants selected "join a self-help group where people with similar problems help each other" and "take prescription medication" as their first choice.

Table 4

First Choice of Participants for Treatment of Major Depressive Disorder

Statement	% of Participants Who Ranked as First Choice
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	32.9
Talk to family and friends about it	30.7
Go to a general medical doctor for help	15.1
Go to a psychiatrist for help	9.5
Talk to a minister, priest, rabbi, or other religious leader	8.3
No treatment	2.8
Join a self-help group where people with similar problems help each other	1.4
Take prescription medication	1.4
Go to a spiritual or natural healer for help	0
Take non-prescription medication, like over the counter sleeping pills	0
Check into a mental hospital	0

Schizophrenia Vignette

When asked about the seriousness of the individual's situation suffering from schizophrenia, about 98.8% responded the problem was "very serious" and only about 1% responded "somewhat serious." When asked if the individual in the vignette has a mental illness, 98.4% of the participants responded "yes" with only 1.6% responding "don't know/not sure." As with the major depressive disorder vignette, a majority of the participants also correctly identified the problem being experienced by the person in the vignette as schizophrenia or some form of psychosis, 80%; 12.9% responded "no" and 7.1% responded "don't know/not sure."

For the causes of schizophrenia, Table 5 gives the percentage of participants that responded "very likely" that each cause is a contributor. The item with the highest endorsement for the cause of schizophrenia was "a chemical imbalance in the brain" with about 82% of the participants responding "very likely." The lowest two items of endorsement for the cause of schizophrenia was "God's will" and "the way she was raised," each with only 1.2% of respondents believing it is "very likely" these factors were causes for schizophrenia.

Table 5

Participants Beliefs about Causes of Schizophrenia

Statement	*N*	Mean	Standard Deviation	Percentage Responding "Very Likely"
A chemical imbalance in the brain	85	1.20	.483	82.4
A genetic or inherited problem	84	1.93	1.073	46.4

Table 5 (continued).

Statement	*N*	Mean	Standard Deviation	Percentage Responding "Very Likely"
Stressful circumstances in her life	83	1.80	.852	42.2
Her own behavior	83	3.17	.908	7.2
God's will	81	3.54	.708	1.2
The way she was raised	83	3.28	.770	1.2

Participants responded that it was "not at all likely" the individual's situation would improve on its own with 70.6% selecting this option. Other participants, about 26%, responded it was "not very likely" the situation would improve on its own and 3.5% responded "somewhat likely." When asked how likely the individual's situation would improve with treatment, 64.7% responded "very likely," while 35.3% responded "somewhat likely."

Participants were asked to select "yes", "no", or "don't know" for several treatment options for schizophrenia. Table 6 lists the percentage of participants who positively endorsed each treatment option. The treatment options "go to a psychiatrist for help" and "go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help" received the highest endorsements for treatment of schizophrenia with between 96% and 97% of respondents endorsing these items. About 81% of respondents positively endorsed "talk to family and friends about it. "No treatment" and "take non-prescription medication, like over the counter sleeping pills"

were endorsed least with only 6.5% and 5.3% of participants responding "yes" to these options.

Table 6

Participants Beliefs about Treatment of Schizophrenia

Statement	% of Participants Responding "Yes"
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	97.4
Go to a psychiatrist for help	96.2
Talk to family and friends about it	81.6
Take prescription medication	72.4
Check into a mental hospital	70.1
Go to a general medical doctor for help	68.8
Talk to a minister, priest, rabbi, or other religious leader	60.0
Join a self-help group where people with similar problems help each other	52.6
Go to a spiritual or natural healer for help	25.0
No treatment	6.5
Take non-prescription medication, like over the counter sleeping pills	5.3

Respondents were then asked to rank order treatment options for schizophrenia. Table 7 shows the percentage of participants who chose each treatment option as their first choice. "Go to a psychiatrist for help" and "check into a mental hospital" were chosen first as treatment options, 23.4% and 22.2% respectively. "Talk to a minister,

priest, rabbi, or other religious leader," "take non-prescription medication, like over the counter sleeping pills," and "take prescription medication" were chosen by only 5%, 1.7%, and 1.6% respectively.

Table 7

First Choice of Participants for Treatment of Schizophrenia

Statement	% of Participants Who Ranked as First Choice
Go to a psychiatrist for help	23.4
Check into a mental hospital	22.2
Go to a general medical doctor for help	17.5
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	17.2
Talk to family and friends about it	14.8
Talk to a minister, priest, rabbi, or other religious leader	5.0
Take non-prescription medication, like over the counter sleeping pills	1.7
Take prescription medication	1.6
Join a self-help group where people with similar problems help each other	0
Go to a spiritual or natural healer for help	0
No treatment	0

Drug Dependence Vignette

For the drug dependence disorder vignette, about 96% of the participants recognized the individual's problem was very serious. Only 4% responded the

individual's problem was somewhat serious. When asked if the individual in the vignette had a mental illness, the sample was almost split; 60% of the participants responded "yes" and 40% responded "no." Participants overwhelming correctly identified drug dependence as the problem being experienced by the individual in the vignette, 100%.

The item with the highest amount of endorsement by participants for the cause of individual's drug dependence was "her own behavior" with 85.3% responding "very likely" to this choice. The item that received the lowest rate of endorsement was "God's will" with 2.8% of participants responding "very likely" to this factor. Table 8 gives the percentage of participants that responded "very likely" that each cause is a contributor.

Table 8

Participants Beliefs about Causes of Drug Dependence

Statement	*N*	Mean	Standard Deviation	Percentage Responding "Very Likely"
Her own behavior	75	1.23	.649	85.3
Stressful circumstances in his life	75	2.15	.982	29.3
A chemical imbalance in the brain	72	2.44	1.112	26.4
The ways she was raised	72	2.83	.919	5.6
A genetic or inherited problem	73	3.10	.974	5.5
God's will	71	3.79	.476	2.8

Participants responded that it was "not at all likely" the individual's situation would improve on its own with 59.2% selecting this option. Some of the participants, 32.9%, responded it was "not very likely" the situation would improve on its own; 6.6% responded "somewhat likely;" and 1.3% responded "very likely." When asked how likely

the individual's situation would improve with treatment, 72.4% responded "very likely." Other participants responded "somewhat likely," 26.3%, and "not very likely," 1.3%.

Participants were asked to select "yes," "no," or "don't know" for several treatment options. Table 9 lists the percentage of participants who responded "yes" for each treatment option. The highest item of endorsement for participants for treatment of drug dependence, with 100% of participants answering "yes" for this option, was "go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help." The treatment options "talk to family and friends about it" and "join a self-help group where people with similar problems help each other" received 95.8% and 90.3% "yes" responses, respectively. "No treatment" and "take non-prescription medication, like over the counter sleeping pills" received the lowest number of positive responses at 5.6% and 2.8%.

Table 9

Participants Beliefs about Treatment of Drug Dependence

Statement	% of Participants Responding "Yes"
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	100
Talk to family and friends about it	95.8
Join a self-help group where people with similar problems help each other	90.3
Talk to a minister, priest, rabbi, or other religious leader	83.1
Go to a general medical doctor for help	79.2
Go to a psychiatrist for help	64.8

Table 9 (continued).

Statement	% of Participants Responding "Yes"
Check into a mental hospital	38.0
Go to a spiritual or natural healer for help	35.2
Take prescription medication	20.0
No treatment	5.6
Take non-prescription medication, like over the counter sleeping pills	2.8

Participants were also asked to rank order treatment options from highest to lowest for drug dependence, indicating what the person should do. Table 10 shows the percentage of participants who ranked each treatment option as their first choice. "Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help" was the first choice of the participants with the highest percentage, about 42%. "Talk to a minister, priest, rabbi, or other religious leader" and "go to a psychiatrist for help" were chosen first by about 7.1% and 7% of participants, respectively.

Table 10

First Choice of Participants for Treatment of Drug Dependence

Statement	% of Participants Who Ranked as First Choice
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	42.1
Go to a general medical doctor for help	17.5

Table 10 (continued).

Statement	% of Participants Who Ranked as First Choice
Talk to family and friends about it	15.8
Check into a mental hospital	13.8
Talk to a minister, priest, rabbi, or other religious leader	7.1
Go to a psychiatrist for help	7.0
Take prescription medication	0
Take non-prescription medication, like over the counter sleeping pills	0
Join a self-help group where people with similar problems help each other	0
Go to a spiritual or natural healer for help	0
No treatment	0

Alcohol Dependence Vignette

When asked about the seriousness of the individual's situation suffering from alcohol dependence, about 65.7% responded the problem was "very serious," 30% responded "somewhat serious," and 4.3% responded "not very serious." When asked if the individual in the vignette has a mental illness, the results were evenly split with 46.9% of the participants responding "yes" and "no." The alcohol dependence vignette had the fewest number of participants identifying alcoholism as a mental illness. Participants overwhelming correctly identified alcohol dependence as the problem being experienced by the individual in the vignette, 100%.

For the causes of the alcohol dependence, Table 11 gives the percentage of participants that responded "very likely" that each cause is a contributor. The responses for the causes were in the same order as those for drug dependence. The item with the highest endorsement for the cause of alcohol dependence was "his own behavior" with about 76.1% of the participants responding "very likely." Next, about 61.2% of participants responded "very likely" that alcohol dependence is caused by "stressful circumstances in his life." The lowest two items of endorsement for the cause of alcohol dependence was "the way he was raised" and "God's will," with 12.3% and 1.6% of respondents believing it is "very likely" these factors were causes for alcohol dependence.

Table 11

Participants Beliefs about Causes of Alcohol Dependence

Statement	*N*	Mean	Standard Deviation	Percentage Responding "Very Likely"
His own behavior	67	1.33	.683	76.1
Stressful circumstances in his life	67	1.58	.907	61.2
A chemical imbalance in the brain	64	2.44	1.006	17.2
A genetic or inherited problem	64	2.31	.941	17.2
The way he was raised	65	2.37	.858	12.3
God's will	63	3.78	.465	1.6

Participants responded that it was "not very likely" the individual's situation would improve on its own with 55.2% selecting this option. Other participants, about

22.4% responded it was "not at all likely" the situation would improve on its own, 19.4% responded "somewhat likely," and 3% responded "very likely." When asked how likely the individual's situation would improve with treatment, 68.7% responded "very likely," while 31.3% responded "somewhat likely."

Participants were asked to select "yes," "no," or "don't know" for several treatment options for alcohol dependence. Table 12 lists the percentage of participants who positively endorsed each treatment option. The two treatment options "talk to family and friends about it" and "join a self-help group where people with similar problems help each other" received the highest endorsements for treatment of alcohol dependence with both having 98.5% of respondents endorsing these items. About 92% of respondents positively endorsed "go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help." "No treatment" and "take non-prescription medication, like over the counter sleeping pills" were endorsed least with only 9.4% and 6.3% of participants responding "yes" to these options.

Table 12

Participants Beliefs about Treatment of Alcohol Dependence

Statement	% of Participants Responding "Yes"
Talk to family and friends about it	98.5
Join a self-help group where people with similar problems help each other	98.5
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	92.3
Talk to a minister, priest, rabbi, or other religious leader	84.4

Table 12 (continued).

Statement	% of Participants Responding "Yes"
Go to a general medical doctor for help	75.4
Go to a psychiatrist for help	57.8
Go to a spiritual or natural healer for help	35.9
Check into a mental hospital	34.4
Take prescription medication	21.9
No treatment	9.4
Take non-prescription medication, like over the counter sleeping pills	6.3

Respondents were then asked to rank treatment options for alcohol dependence. Table 13 shows the percentage of participants who chose each treatment option as their first choice. "Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help" and "talk to family and friends about it" were chosen first as treatment options, 49% and 20% respectively. The item "go to a spiritual or natural healer for help," was the lowest endorsed item with only 1.9% of participants choosing this option.

Table 13

First Choice of Participants for Treatment of Alcohol Dependence

Statement	% of Participants Who Ranked as First Choice
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help	49.1

Table 13 (continued).

Statement	% of Participants Who Ranked as First Choice
Talk to family and friends about it	20.0
Go to a general medical doctor for help	11.1
Check into a mental hospital	5.7
Go to a psychiatrist for help	5.7
Talk to a minister, priest, rabbi, or other religious leader	5.6
Join a self-help group where people with similar problems help each other	5.5
Go to a spiritual or natural healer for help	1.9
Take prescription medication	0
Take non-prescription medication, like over the counter sleeping pills	0
No treatment	0

A series of chi-square analyses were conducted to identify if any of the items from the vignettes were significantly associated with the demographic variables gender, race/ethnicity, age, area of study/major in college, highest degree obtained, total household income, current marital status, and religious affiliation for the entire sample and the sample of complete questionnaires. For the major depressive disorder vignette, schizophrenia vignette, and alcohol dependence vignette there were no significant relationships in the entire sample or the sample of complete questionnaires for any of the demographic variables. Results from the drug dependence vignette indicated a significant result for race/ethnicity and opinions on the likelihood of the individual's situation

improving with treatment for the entire sample, X^2 (4, N = 65) = 7.271, p = .007 and the sample of complete questionnaires, X^2 (1, N = 51) = 6.246, p = .012.

A Spearman's correlation coefficient or Spearman's *rho* was conducted to analyze the relationships between rankings of treatment options for each vignette. Each vignette had eleven treatment options and participants were asked to rank them in order, from one to eleven, indicating what the individual should do. Several significant relationships were found for each of the treatment options.

- No treatment: For the entire sample, rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(56) = .511$, p □ .001. Rankings were not significant for any of the other vignettes. For the sample of complete questionnaires, rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(37) = .511$, p = .001; the major depressive disorder and the alcohol dependence vignettes, $r_s(38) = .314$, p = .048; the drug dependence and the alcohol dependence vignettes, $r_s(39) = .312$, p = .047. Rankings were not significant for any of the other vignettes.
- Talk to family and friends about it: For the entire sample, rankings were significant for each of the vignettes; the major depressive disorder and the schizophrenia vignettes, $r_s(59) = .398$, p = .002; the major depressive disorder and the drug dependence vignettes, $r_s(55) = .453$, p □ .001; the major depressive disorder and the alcohol dependence vignettes, $r_s(53) = .406$, p = .002; the schizophrenia and the drug dependence vignettes, $r_s(54) = .463$ p □ .001; the schizophrenia and the alcohol dependence vignettes, $r_s(51) = .547$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(52) = .547$, p □ .001.

The same results were true for the sample of complete questionnaires as well. Rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(39) = .353$, $p = .024$; the major depressive disorder and the drug dependence vignettes, $r_s(41) = .444$, $p = .003$; the major depressive disorder and the alcohol dependence vignettes, $r_s(40) = .356$, $p = .021$; the schizophrenia and the drug dependence vignettes, $r_s(39) = .481$, $p = .001$; the schizophrenia and the alcohol dependence vignettes, $r_s(39) = .544$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(40) = .646$, p □ .001.

- Talk to a religious leader: For the entire sample, rankings were significant for each of the vignettes; the major depressive disorder and the schizophrenia vignettes, $r_s(58) = .496$, p □ .001; the major depressive disorder and the drug dependence vignettes, $r_s(54) = .588$, p □ .001; the major depressive disorder and the alcohol dependence vignettes, $r_s(52) = .612$, p □ .001; the schizophrenia and the drug dependence vignettes, $r_s(53) = .630$, p □ .001; the schizophrenia and the alcohol dependence vignettes, $r_s(50) = .542$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(51) = .699$, p □ .001. The results were also true for the sample of complete questionnaires. Rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(38) = .538$, p □ .001; the major depressive disorder and the drug dependence vignettes, $r_s(39) = .643$, p □ .001; the major depressive disorder and the alcohol dependence vignettes, $r_s(39) = .695$, p □ .001; the schizophrenia and the drug dependence vignettes, $r_s(38) = .632$, p □ .001; the schizophrenia and the alcohol dependence

vignettes, $r_s(38) = .566$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(39) = .727$, p □ .001.

- Go to a general medical doctor: For the entire sample, rankings were significant for each of the vignettes; the major depressive disorder and the schizophrenia vignettes, $r_s(60) = .459$, p □ .001; the major depressive disorder and the drug dependence vignettes, $r_s(53) = .364$, $p = .006$; the major depressive disorder and the alcohol dependence vignettes, $r_s(51) = .411$, $p = .002$; the schizophrenia and the drug dependence vignettes, $r_s(53) = .420$, $p = .001$; the schizophrenia and the alcohol dependence vignettes, $r_s(51) = .477$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(51) = .728$, p □ .001. For the rankings of complete questionnaires, rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(38) = .485$, $p = .001$; the schizophrenia and the drug dependence vignettes, $r_s(38) = .477$, $p = .002$; the schizophrenia and the alcohol dependence vignettes, $r_s(38) = .480$, $p = .002$; the drug dependence and the alcohol dependence vignettes, $r_s(39) = .655$, p □ .001.
- Got to a psychiatrist for help: For the entire sample, rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(61) = .421$, $p = .001$; the major depressive disorder and the alcohol dependence vignettes, $r_s(50) = .364$, $p = .008$; the schizophrenia and the drug dependence vignettes, $r_s(54) = .339$, $p = .011$; the schizophrenia and the alcohol dependence vignettes, $r_s(50) = .304$, $p = .028$; the drug dependence and the alcohol dependence vignettes, $r_s(51) = .473$, p □ .001. The same rankings were significant for the sample of complete questionnaires as well. Rankings were significant for the major depressive

disorder and the schizophrenia vignettes, $r_s(39) = .425$, $p = .006$; the major depressive disorder and the alcohol dependence vignettes, $r_s(38) = .343$, $p = .031$; the schizophrenia and the drug dependence vignettes, $r_s(39) = .424$, $p = .006$; the schizophrenia and the alcohol dependence vignettes, $r_s(38) = .329$, $p = .038$; the drug dependence and the alcohol dependence vignettes, $r_s(39) = .407$, $p = .008$.

- Go to a mental health professional: For the entire sample, rankings were significant for each of the vignettes; the major depressive disorder and the schizophrenia vignettes, $r_s(62) = .500$, p □ .001; the major depressive disorder and the drug dependence vignettes, $r_s(55) = .330$, $p = .012$; the major depressive disorder and the alcohol dependence vignettes, $r_s(53) = .440$, $p = .001$; the schizophrenia and the drug dependence vignettes, $r_s(54) = .431$, $p = .001$; the schizophrenia and the alcohol dependence vignettes, $r_s(52) = .465$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(52) = .737$, p □ .001. The same results were true for the sample of complete questionnaires except for one, the major depression disorder and drug dependence vignettes. Rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(40) = .506$, $p = .001$; the major depressive disorder and the alcohol dependence vignettes, $r_s(40) = .388$, $p = .011$; the schizophrenia and the drug dependence vignettes, $r_s(39) = .524$, p □ .001; the schizophrenia and the alcohol dependence vignettes, $r_s(39) = .499$, $p = .001$; the drug dependence and the alcohol dependence vignettes, $r_s(40) = .665$ p □ .001.
- Go to a spiritual or natural healer: For the entire sample, rankings were significant for each of the vignettes; the major depressive disorder and the schizophrenia

vignettes, $r_s(57) = .525$, $p = .000$; the major depressive disorder and the drug dependence vignettes, $r_s(53) = .499$, p □ .001; the major depressive disorder and the alcohol dependence vignettes, $r_s(50) = .467$, p □ .001; the schizophrenia and the drug dependence vignettes, $r_s(52) = .443$, $p = .001$; the schizophrenia and the alcohol dependence vignettes, $r_s(49) = .645$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(50) = .581$, p □ .001. The results were true for the sample of complete questionnaires as well. Rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(37) = .486$, $p = .002$; the major depressive disorder and the drug dependence vignettes, $r_s(38) = .555$, p □ .001; the major depressive disorder and the alcohol dependence vignettes, $r_s(38) = .498$, $p = .001$; the schizophrenia and the drug dependence vignettes, $r_s(37) = .447$, $p = .004$; the schizophrenia and the alcohol dependence vignettes, $r_s(37) = .583$, p □ .001; the drug dependence and the alcohol dependence vignettes, $r_s(38) = .558$, p □ .001.

- Join a self-help group: For the entire sample, rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(60) = .359$, $p = .004$ and the drug dependence and the alcohol dependence vignettes, $r_s(52) = .459$, $p = .000$. This was also true for the sample of complete questionnaires. Rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(39) = .323$, $p = .039$ and the drug dependence and the alcohol dependence vignettes, $r_s(40) = .400$, $p = .009$.
- Take non-prescription medication: For the entire sample, rankings were significant for each of the vignettes; the major depressive disorder and the

schizophrenia vignettes, $r_s(56) = .282$, $p = .032$; the major depressive disorder and the drug dependence vignettes, $r_s(52) = .287$, $p = .035$; the major depressive disorder and the alcohol dependence vignettes, $r_s(49) = .538$, p □ .001; the schizophrenia and the drug dependence vignettes, $r_s(52) = .443$, $p = .001$; the schizophrenia and the alcohol dependence vignettes, $r_s(49) = .324$, $p = .020$; the drug dependence and the alcohol dependence vignettes, $r_s(50) = .381$, $p = .005$. The results were true for the sample of complete questionnaires as well except one, the major depressive disorder and the schizophrenia vignettes. Rankings were significant for the major depressive disorder and the drug dependence vignettes, $r_s(38) = .359$, $p = .023$; the major depressive disorder and the alcohol dependence vignettes, $r_s(38) = .497$, $p = .001$; the schizophrenia and the drug dependence vignettes, $r_s(37) = .601$, p □ .001; the schizophrenia and the alcohol dependence vignettes, $r_s(37) = .360$, $p = .024$; the drug dependence and the alcohol dependence vignettes, $r_s(38) = .324$, $p = .041$.

- Take prescription medication: For the entire sample, rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(58) = .419$, $p = .001$; the major depressive disorder and the drug dependence vignettes, $r_s(54) = .274$, $p = .041$; the schizophrenia and the drug dependence vignettes, $r_s(54) = .282$, $p = .035$; the drug dependence and the alcohol dependence vignettes, $r_s(51) = .416$, $p = .002$. This was also true for the sample of complete questionnaires except one, the major depressive disorder and the drug dependence vignettes Rankings were significant for the major depressive disorder and the schizophrenia vignettes, $r_s(38) = .507$, $p = .001$; the schizophrenia and the drug dependence

vignettes, $r_s(39) = .319$, $p = .042$; the drug dependence and the alcohol dependence vignettes, $r_s(39) = .448$, $p = .003$.

- Check into a mental hospital: For entire sample, only one ranking was significant, the drug dependence and the alcohol dependence vignettes, $r_s(51) = .563$, p □ .001. The same results were true for the sample of complete questionnaires. Rankings were significant for the drug dependence and the alcohol dependence vignettes, $r_s(39) = .533$ p □ .001.

A Spearman's correlation coefficient or Spearman's *rho* was also conducted for the relationship between rankings of treatment options for each vignette and race/ethnicity. Rankings were significant for one treatment option, "join a self-help group," and race/ethnicity in the entire sample. Rankings were significant for race/ethnicity and the drug dependence vignette, $r_s(52) = .348$, $p = .010$; and race/ethnicity and the alcohol vignette, $r_s(53) = .341$, $p = .011$.

Attitudes toward Seeking Professional Help Scale

Participants were asked to read ten statements and state whether they disagreed, partly disagreed, partly agreed, or agreed with each statement. The ATSPPHS-SF consists of five positively phrased statements and five negatively phrased statements. Scoring of negatively worded items was reversed for analyses. Participants highly agreed with two of the statements; "If I believed I was having a mental breakdown, my first inclination would be to get professional attention" and "I would want to get psychological help if I were worried or upset for a long period of time," with 52.3% of participants agreeing with statement. Participants partly agreed with three of the statements; "If I were experiencing a serious emotional crisis at this point in my life, I

would be confident that I could find relief in psychotherapy," (56.9%) "I might want to have psychological counseling in the future," and "A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help" with 35.4% of the participants partly agreeing with these latter two statements.

Participants partly disagreed with one statement "Personal and emotional troubles, like many things, tend to work out by themselves" with about 43% of participants partly disagreeing with statement. Participants evenly split on one statement, "Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me" with 41.5% partly disagreeing and 41.5% disagreeing. Participants disagreed with three statements; "The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts," "There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help," and "A person should work out his or her own problems; getting psychological counseling would be a last resort" with 76.9%, 33.8%, and 49.2% respectively. Table 14 gives the percentages of participants' responses to each statement.

Table 14

Participants Beliefs about Seeking Professional Help

Statement	Disagree	Partly Disagree	Partly Agree	Agree
If I believed I was having a mental breakdown, my first inclination would be to get professional attention.	4.6	9.2	33.8	52.3
The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	76.9	16.9	6.2	0

Table 14 (continued).

Statement	Disagree	Partly Disagree	Partly Agree	Agree
If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.	3.1	12.3	56.9	27.7
There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.	33.8	29.2	30.8	6.2
I would want to get psychological help if I were worried or upset for a long period of time.	3.1	7.7	36.9	52.3
I might want to have psychological counseling in the future.	26.2	15.4	35.4	23.1
A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.	4.6	30.8	35.4	29.2
Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.	41.5	41.5	13.8	3.1
A person should work out his or her own problems; getting psychological counseling would be a last resort.	49.2	26.2	23.1	1.5
Personal and emotional troubles, like many things, tend to work out by themselves.	35.4	43.1	20.0	1.5

Association between Ethnicity and Mental Health Literacy

A chi-square analysis was conducted to identify if there was a significant association with the demographic variable race/ethnicity and mental health literacy. Mental health literacy was determined by the responses to the opened-ended “Does ‘Joe’ have a mental illness? Why or Why not? If yes, what kind of illness might it be?” The responses were categorized into two variables for each of the four vignettes. One variable

for “is this a mental illness” (yes, no, don’t know/not sure) and the second for “what kind of mental illness” (correct, incorrect, don’t know/not sure). There were no significant associations found based on the results of the chi-square analysis. These results were true for the entire sample and for the sample of complete questionnaires.

Ethnic Differences in Attitudes toward Seeking Professional Help

Ethnicity/race differences in attitudes toward seeking professional help were examined using an independent samples t-test. The results did not indicate significant ethnic differences in attitudes toward seeking help, as determined by the ATSPPHS-SF totals. For the entire sample, African Americans (M = 26.56, SD = 3.35) and Caucasians (M = 24.65, SD = 5.18) did not differ significantly in attitudes toward seeking professional help, $t(63) = -.1.782$, $p = .079$. For the sample of complete questionnaires, the results also do not indicate significant ethnic differences in attitudes toward seeking help, as determined by the ATSPPHS-SF totals. African Americans (M = 26.11, SD = 4.06) and Caucasians (M = 24.79, SD = 5.14) did not differ significantly in attitudes toward seeking professional help, $t(49) = -.1.023$, $p = .312$.

A multivariate analysis of variance (MANOVA) was conducted to examine interactions between race/ethnicity and each of the items on the ATSPPHS-SF. For the entire sample, the results of MANOVA indicated a significant effect for race/ethnicity and the individual items on the scale, $F(8,56) = 2.837$, $p = .010$. The sample of complete questionnaires did not reflect a significant effect, $F(8,42) = 1.594$, $p = .156$. The follow-up Univariate ANOVAs indicated significant effects for the statements “If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy,” $F(1,63) = 8.103$, $p = .006$, and “I would want to get

psychological help if I were worried or upset for a long period of time," $F(1,63) = 9.526$, $p = .003$. The results of the MANOVA analysis for the entire sample are displayed in Table 15.

Table 15

MANOVA - ATSPPHS-SF/Ethnicity

Statement	*df*	Mean Square	*F*	*p*
If I believed I was having a mental breakdown, my first inclination would be to get professional attention.	1	2.599	3.903	.053
The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	1	.957	2.941	.091
If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.	1	3.811	8.103	.006
I would want to get psychological help if I were worried or upset for a long period of time.	1	4.910	9.526	.003
I might want to have psychological counseling in the future.	1	.043	.034	.855
Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.	1	1.349	2.144	.148
A person should work out his or her own problems; getting psychological counseling would be a last resort.	1	.044	.059	.810
Personal and emotional troubles, like many things, tend to work out by themselves.	1	.041	.066	.798

Note: Two out of the ten statements were removed to increase the reliability of the scale based on the results of the Cronbach's alpha analysis.

Relationship between Help Seeking Attitudes and Mental Health Literacy

A correlational analysis was performed in order to determine whether mental health literacy was a predictor of attitudes toward seeking professional psychological help. A sum of the scores from the ATSPPH-SF and a sum of the responses to the mental health literacy questions was used for this analysis. There was a non-significant correlation of .166 (p = .429) between attitudes towards seeking professional psychological help and mental health literacy for the entire sample. For the sample of complete questionnaires, there was also a non-significant correlation of .310 (p = .160) between attitudes towards seeking professional help and mental health literacy.

CHAPTER V

SUMMARY

The goal of this study was to determine if mental health literacy in young college-educated African Americans was related to their attitudes toward seeking help for mental illness, as well as their attitudes and beliefs toward mental illness overall as compared to Caucasians. It was hypothesized that low mental health literacy contributed to attitudes toward seeking help as well as attitudes and beliefs toward mental illness. The findings indicate mental health literacy and attitudes are not connected, but the results do hold some interesting implications.

Interpretations and Connection to Previous Research

Major Depressive Disorder Vignette

A majority of the participants reported major depression is a serious problem. Most of them also identified the problem to be a mental illness and correctly identified the problem in the depression vignette as depression or some form of depression. Participants reported the cause of the major depression to be due to stress or stressful circumstances. Very few of the participants attributed major depression to God's will, which was true for all four the vignettes. Although city and state of residence was not used in the formal analysis, this response was interesting since most of the participants reside in what is considered "the bible belt." Participants reported the situation experienced by the individual would very likely improve with treatment and it was not likely it would improve on its own.

When asked about treatment options, participants overwhelmingly endorsed talking to friends and family over the other treatment options, followed by going to a

mental health professional and talking to a religious leader. Although talking to a religious leader was highly endorsed, it was not ranked high on the list for the first choice of treatment. Going to a therapist and talking with friends and family were first and second, respectively, but talking to a religious leader was ranked fifth as the first choice of treatment out of eleven choices.

Schizophrenia Vignette

An overwhelming majority of the participants reported the individual's situation was very serious and identified the problem as a mental illness. Most of the participants also correctly identified the problem described in the schizophrenia vignette as schizophrenia. Most of the participants reported the cause of schizophrenia to be very likely due to a chemical imbalance in the brain. The next likely causes were a genetic or inherited problem and stressful circumstances in life. Participants did not report it was very likely for the individual's situation to improve on its own and that it was very likely for it to improve with treatment.

When asked about options for treatment, two of the treatment options were highly endorsed. Going to a mental health professional and going to a psychiatrist received the highest endorsements for treatment. The least endorsed option was not receiving any treatment at all or taking non-prescription medication. Although checking into a mental hospital was not chosen as the highest endorsed option for treatment, it was the second for first choice of treatment. The treatment option with the highest rank was going to a mental health professional.

Drug Dependence Vignette

The majority of the participants reported the problem described in the vignette to be very serious. When asked whether the problem was a mental illness, more than half responded yes and all of the participants correctly identified the problem in the drug dependence vignette as drug dependence. Most the participants reported the cause of drug dependence was very likely to be attributed to the individual's own behavior. Stressful circumstances were the next very likely cause, but this option did not receive nearly as many endorsements as did their own behavior.

Most of the participants reported the situation was not very likely to improve on its own but would very likely improve with treatment. Overwhelmingly, participants endorsed going to a mental health professional as a treatment option. Talking to family and friends and joining a self-help group were also highly endorsed. Going to a mental health professional and talking with family and friends were ranked as the first and second as the first choice of treatment for drug dependence. Although joining a self-help group was highly endorsed by the participants as a treatment option, it was not ranked as the first choice of treatment by any of the participants.

Alcohol Dependence Vignette

Over half of the participants reported the problem described in the vignette was very serious, but less than half identified the problem as a mental illness. This vignette had the least amount of participants to identify the problem in the alcohol dependence vignette as a mental illness. Most of the participants also correctly identified the problem as alcoholism or an alcohol problem. As with the drug dependence vignette, a majority of the participants reported the cause of alcoholism was very likely to be attributed to the

individual's own behavior, followed closely by stressful circumstances in the individual's life. Among the participants, stress seemed to be most attributed cause for the substance abuse disorders.

Over half of the participants reported it was not very likely the individual's situation would improve on its own and the majority reported it was very likely the situation would improve with treatment. A great majority of the participants endorsed talking to family and friends and joining a self-help group as treatment options. Closely following these two options was going to a mental health professional. Other options also highly endorsed were talking to a religious leader, going to their general medical doctor, and going to a psychiatrist. Each of these options was endorsed by more than half of the participants. As with the drug dependence vignette, going to a mental health professional and talking to family and friends were ranked first and second as the first choice of treatment by the participants for alcohol dependence. The other highly endorsed options for treatment had various ranks on the list. Although a great majority of the participants endorsed joining a self-help group as a treatment option, it ranked seventh as a first choice of treatment.

When comparing the responses from each of the vignettes with each of the demographics, there were no differences between any of the demographics and the major depressive disorder vignette, schizophrenia vignette, or alcohol dependence vignette. A difference was indicated for race/ethnicity and opinions on the likelihood of the individual's situation improving with treatment for the drug dependence vignette.

Other results from the vignettes included the responses to the open-ended questions about whether or not the problem described in the vignette was a mental illness.

For the depression and schizophrenia vignettes, participants readily agreed these two conditions were indeed a mental illness. The drug dependence and alcoholism vignettes evoked different reactions from the participants. Some of the comments for drug dependence were "No, I do not think she has a mental illness because I believe she has a drug abuse problem," "No, she has drug problem, she chose to do cocaine," "She may have altered her chemical balance in her brain with cocaine but do not believe she has a mental illness," "Taking drugs does not qualify as a mental illness," and "She is an addict." Some of the comments for alcoholism "He has an addiction, not a mental illness," "He has a drinking problem, not a mental illness," "No mental illness, just have a drinking problem," "Not a mental illness, he didn't have any behaviors that drove him to drink other than pleasure." Many of the participants did give correctly identify the disorders, but some responses seemed unsure. Some of these comments included "I'm not trained to diagnose," "I'm not licensed," and "I don't have the right degree to declare this." Responses to the open-ended questions relate to research conducted by Link et al. (1999). Participants in the GSS Survey were also reluctant to apply the general term "mental illness" to specific conditions (Link et al., 1999).

The responses to the open-ended questions also relate to the research by Jorm (2006) regarding the public's knowledge and recognition of mental health disorders, or their mental health literacy. Being able to recognize signs and symptoms is not the same as diagnosing someone with a mental illness. Recognizing signs and symptoms is a part of not only mental health literacy, but health literacy overall. The findings from this study suggest more knowledge is needed regarding substance use disorders. The point of mental health literacy is to provide knowledge of mental disorders so the public can

recognize them, not make a diagnosis (Jorm, 2006). Although participants were able to correctly identify the disorder, it would still be beneficial to participate in a mental health literacy program to gain confidence and increase knowledge of certain disorders. Also, a study by Speller (2005) had the same results as this study, as participants were less likely to identify alcohol dependency as a mental illness. Many did not believe alcohol dependency to be a mental illness (Speller, 2005). This finding is also important because substance use disorders are among the most common forms of mental illness, especially for African Americans (American Psychiatric Association, 2012).

Another finding related to mental health literacy is related to previous findings by the American Psychiatric Association (2009) indicating many African Americans misinterpret symptoms of depression. The results of this study showed the opposite. African Americans in this study correctly identified the disorder in the depression vignette. Also, recognizing symptoms in real life will be different from recognizing them in a vignette. NAMI (2009) suggests African Americans tend to rely on family, social and religious communities for support rather than professional services. The results from this study are in line with the information from NAMI, as African Americans in this study tended to give high endorsements to talking to family and friends and talking to a religious leader as a treatment option. Also related to the TRA, specifically subjective norms, those most important to the individual have an influence on their intent to perform a behavior. Results from this study show this to be accurate.

Related to treatment, BMC (2007) suggests most of the general population do not trust medical treatments and prefer psychosocial, lifestyle, and self-help interventions. In this study, participants would choose self-help interventions as options for treatment, but

the majority also responded positively and highly recommended medical or professional treatment as a first choice. HHS (2012) states African Americans are less likely to receive antidepressant prescription medication. Related to this study, participants did not highly endorse treatment with prescription medication, which may relate to the suggestions from HHS.

A theme throughout all vignettes related to treatment options, is something that was highly endorsed as an option for treatment did not always end up being highly endorsed as the first choice for treatment. For example, talking to a religious leader was highly endorsed in all of the vignettes but was not highly endorsed as a first choice of treatment. This could possibly be attributed to a majority of the participants being from what is considered the "bible belt" and most of the participants identifying having some sort of religious affiliation. From the results, it can be speculated that faith is important, but so is professional medical treatment. Another example is going to a psychiatrist was highly endorsed as a treatment option, but taking prescription medication was not. It could be speculated that going to a psychiatrist is not equated with taking medication.

The rankings of the treatment options were significant for several of the vignettes. These results indicate there is a relationship between the vignettes and how the participants ranked the treatment options. The rankings of treatment options for the major depressive disorder and schizophrenia vignettes were usually the same. The drug dependence and alcohol dependence vignettes displayed similar results. This relates back to previously mentioned outcomes from the vignettes. Substance use disorders were perceived differently from major depressive disorder and schizophrenia.

For several of the treatment options (talking to family and friends, talking to a religious leader, going to a medical doctor, go to a therapist, go to a spiritual or natural healer, take non-prescription medication), the order of ranking for these options were significantly correlated, meaning participants tended to rank them in the same order, no matter the problem being described. This was not the case with other treatment options. For checking into a mental hospital, only the drug dependence and alcohol dependence vignettes were ranked in the same way. This may be attributed to these disorders both being related to substance abuse. Another example of the grouping of vignettes based on the described problem was for the treatment option self-help. The major depressive disorder and schizophrenia vignettes ranking orders were the same and the drug dependence and alcohol dependence vignettes rankings were the same. Ranking for some individual treatment options depends on the problem described. Based on the participants' rankings, certain treatments were ranked differently depending on the mental illness.

Attitudes toward Seeking Professional Psychological Help Scale

Out of the ten statements on the ATSPPHS-SF, participants highly agreed with only two of the statements, "If I believed I was having a mental breakdown, my first inclination would be to get professional attention" and "I would want to get psychological help if I were worried or upset for a long period of time." Participants highly disagreed with three of the statements, "The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts," "There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help," and "A person should work

out his or her own problems; getting psychological counseling would be a last resort." For the other five statements participants either partly agreed or partly disagreed.

Research by Jorm (2006) suggested more research is needed to determine if improved mental health literacy changes people's help seeking behavior. The results of this study indicate the same. These results are related to transformative learning. As previously stated, a transformation can be made in individual's mindset through the increase of their mental health literacy, leading to an increase in their knowledge of mental health and a change in their attitudes. The goal of this study was not to increase mental health literacy, but to assess the participants' mental health literacy and see if a transformation is needed. The results of this study do not show that a transformation is needed for African Americans in terms of their attitudes and beliefs, but that more information is needed in terms of their behaviors toward seeking help. Also related to transformational learning and the "frames of reference" identified by Mezirow (1997), "frames of reference" ultimately define how a person reacts; the results of this study were in contrast to the theory. A transformation is not necessarily needed for the expected reaction, which is seeking help.

These results are also related to the Theory of Reason of Action (TRA). Behavior is influenced by the intention to perform certain behaviors according to the TRA and beliefs about behavior influences attitudes (Redding et al., 2000). If an individual holds strong beliefs that a positive outcome will occur as a result of their behavior, then the individual will have a positive attitude toward behavior (Montano & Kasprzyk, 2002). The results of this study indicate African Americans have a positive attitude toward seeking professional psychological help, meaning these attitudes should influence them

to actually seek help. Previous research (Broman, 2012) suggests this is not the case. More research is needed in this area.

Association between Ethnicity and Mental Health Literacy

Race/ethnicity was not shown to have an association with mental health literacy. Participants' race/ethnicity had no association with their knowledge of mental illness. There was also no difference in how African Americans and Caucasians responded to these items. The counts for each response for African Americans and Caucasians were approximately the same for each of the variables. The results of this study are in contrast to those found by Speller (2005), whose study compared the knowledge and opinions of mental illness between Asian American and Caucasian college students. In the study by Speller (2005), ethnic and cultural differences perpetuated lack knowledge of mental illness. The difference may exist because the populations are different, Asian American vs. African American and college students vs. college graduates. If a difference truly exists between these groups, this would be an area for further research.

Ethnic Differences in Attitudes toward Seeking Professional Help

Race/ethnicity was not shown to be a significant predictor of attitudes, but there were significant differences on two of the dependent variables. Specifically, African Americans tended to agree more with the statements regarding seeking psychological help than Caucasians. Another significant result that relates to the attitudes of African Americans toward seeking psychological help was the responses to the treatment item in the drug dependence vignette. There was a significant difference in responses by African Americans and Caucasians in the likelihood of the situation improving with treatment. A significantly larger portion of African Americans (85.3%) reported the situation was very

likely to improve with treatment compared 55% of Caucasians. This result indicates African Americans have positive beliefs toward treatment, but other factors may contribute to their reluctance to receive treatment. Again, related to the TRA, positive beliefs should lead to intent to perform the behavior. More research is needed in this area.

In relation to the literature, young, college-educated African Americans have been shown less likely to receive mental health services when compared to their Caucasian counterparts (Broman, 2012). The results from the current study indicate this may not be due to their attitudes towards seeking treatment, as African Americans in this study agreed that psychological help would provide relief and they would want help if worried or upset for long periods of time. Although their attitudes are positive toward treatment, the reluctance to actually follow through may be related to other factors that have been found in previous research, such as concern about stigma (Broman, 2012). Again, this result indicates African Americans have positive beliefs toward treatment, but other factors may contribute to their reluctance to receive treatment. This also relates to the subjective norms of the TRA.

Relationship between Help Seeking Attitudes and Mental Health Literacy

Attitudes toward seeking professional psychological help and mental health literacy were not shown to be related. A positive or negative attitude toward professional psychological help was not shown to be related to mental health literacy. A study by Sharp (2007) indicated mental health literacy has a significant impact on attitudes toward seeking professional mental health services and opinions about mental illness. The results of this study indicate there is no such relationship, meaning more research is needed in this area with this particular population. Previous research has shown mental health

literacy is seen as a determinant of help seeking (Goldney & Fisher, 2008). Again, the results of this study indicate there is no relationship with this particular population and more research is needed in this area.

Limitations

As with every research endeavor, this study suffers from limitations. One limitation is sampling. The respondents constituted a convenience sample and may not be representative of all African Americans and Caucasians and may not be generalizable to the entire population. Sample size was also a limitation of this study. Possibilities for the small sample size may be due to the length of the questionnaire and participants not having the time to complete the questionnaire as the population chosen for this study tends to have busy lives and many responsibilities. Another reason may be reluctance to participate in a study regarding mental illness.

Another limitation was construction of the instrument in collecting demographic data. Demographic data was collected at the end of the instrument and was missing from many of the responses as some of the participants did not reach the end of the questionnaire. On the other hand, for those who identified their race/ethnicity, the sample ended up being approximately equal for African Americans and Caucasians. Many questionnaires were not completed, which may be another limitation of the construction of the instrument and number of variables collected. Future studies may consider shortening the instrument, concentrating on one or two mental illnesses in order to decrease the number of vignettes and variables. This may also help to increase the sample size.

Related to the vignette portion of the instrument, the inclusion of more elements to measure mental health literacy would enhance the instrument. Also, the use of a five or six point scale for Likert items would have been more appropriate for the follow-up questions. The reliance on self-report data was another limitation, making social desirability a concern. Self-report can lead to social desirability bias. Although research has found stigma and undesirable attitudes surround mental illness exists, it is often considered socially unacceptable to express these attitudes.

Future Research

Since research regarding mental health literacy is a fairly new concept, it may be worth researching further since the analysis between attitudes toward seeking professional psychological help and mental health literacy did not have significant results in this study. The results of this study also indicated African Americans have a positive attitude toward professional psychological help, but further research is needed to see how attitudes and behaviors are connected. This was also indicated in previous research (BMC, 2007). Responses related to substance use disorders reflect a need to further research knowledge about these illnesses. From the results, there seems to be a misconception about these disorders. Replication of a study of this nature, with a larger sample, may yield different and more conclusive results.

Although young college-educated African Americans are less likely to receive treatment than their Caucasian counterparts, the results of this study indicate it is not due primarily to their mental health literacy or help seeking attitudes as the two populations are similar in these areas. Further research is needed to determine other factors that may influence young college-educated African Americans and their help-seeking behaviors. It

is essential to monitor how the public views mental illness and mental health services in order to make an improvement in the utilization of services and promote better mental health. According to Gillis (2004), one of most important determinants of health is literacy. Improving health literacy is a goal of adult education, which makes studies surrounding mental health literacy a fit for this field.

APPENDIX A

PERMISSIONS FOR INSTRUMENTS

The questionnaire developed by Link, Phelan, Bresnahan, Stueve, and Pescosolido, titled the MacArthur Mental Health Module "Problems in Modern Living" (1996) as part of the General Social Survey (1996), is considered public record and special permission is not necessary. This information was provided by T.W. Smith (personal communication, May 21, 2014), Director of the General Social Survey at the National Opinion Research Center. The results of this study will be shared with the developers of the survey as requested by Dr. Smith. According to the authors of the Attitudes toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF), Fischer and Farina (1995), the scale is useful for relevant studies and should only be used in research. Fischer and Farina (1995) also stated researchers may use this scale and do not need to contact the authors for permission.

APPENDIX B

INSTRUMENT

Part I – Vignettes

Below are four scenarios describing an individual and his or her life issues. After reading each scenario, please answer the questions that follow. For some questions, there are no right or wrong answers.

Vignette A

James is a 34 year old African American man who has completed a Master's Degree in Electrical Engineering. For the last two weeks James has been really down. He wakes in the morning with a flat, heavy feeling that sticks with him all day long. He isn't enjoying things the way he normally would. In fact, nothing seems to give him pleasure. Even when good things happen, they don't seem to make James happy. He pushes on through his days, but it is really hard. The smallest tasks are difficult to accomplish. He finds it hard to concentrate on anything. He feels out of energy and out of steam. And even though James feels tired, when night comes he can't get to sleep. James feels pretty worthless and very discouraged. James' family has noticed that he hasn't been himself for about the last month and he has pulled away from them. James just doesn't feel like talking.

1) How serious would you consider James' problem to be – very serious, somewhat serious, not very serious, or not at all serious?
   1 Very serious
   2 Somewhat serious
   3 Not very serious
   4 Not at all serious

2) Does James have a mental illness? Why or why not?

   If yes, what kind of mental illness might it be? _____

3) James' situation was likely caused by (rank 1 Very likely, 2 Somewhat likely, 3 Not very likely, 4 Not at all likely)
   a. His or her own behavior
   b. A chemical imbalance in the brain
   c. The way he was raised
   d. Stressful circumstances in his life
   e. A genetic or inherited problem
   f. God's will

4) In your opinion, how likely is it that James' situation will improve on its own?
   a. Very likely
   b. Somewhat likely
   c. Not very likely

d. Not at all likely

5) In your opinion, how likely is it that James' situation will improve with treatment?
   a. Very likely
   b. Somewhat likely
   c. Not very likely
   d. Not at all likely

6) Should James do any of the following:

	Should do: (Yes=1, No=2, Don't know=3)	Rank Order
No Treatment		
Talk to family and friends about it		
Talk to a minister, priest, rabbi, or other religious leader		
Go to a general medical doctor for help		
Go to a psychiatrist for help		
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help		
Go to a spiritual or natural healer for help		
Join a self-help group where people with similar problems help each other		
Take non-prescription medication, like over the counter sleeping pills		
Take prescription medication		
Check into a mental hospital		

Vignette B

Jaime is a 33 year old Caucasian woman who is a successful attorney. Up until a year ago, life was pretty okay for Jaime. But then things started to change. She thought that people around her were making disapproving comments and talking behind her back. Jaime was convinced that people were spying on her and that they could hear what she was thinking. Jaime lost her drive to participate in her usual work and family activities and retreated to her home, eventually spending most of her day in her room. Jaime became so preoccupied with what she was thinking she skipped meals and stopped bathing regularly. At night, when everyone else was sleeping, she was walking back and forth in her room. Jaime was hearing voices even though no one else was around. These voices told her what to do and what to think. She has been living this way for six months.

1) How serious would you consider Jaime's problem to be – very serious, somewhat serious, not very serious, or not at all serious?
   1 Very serious
   2 Somewhat serious
   3 Not very serious
   4 Not at all serious

2) Does Jaime have a mental illness? Why or why not?

   If yes, what kind of mental illness might it be? _____

3) Jaime's situation was likely caused by (rank 1 Very likely, 2 Somewhat likely, 3 Not very likely, 4 Not at all likely)
   a. His or her own behavior
   b. A chemical imbalance in the brain
   c. The way he was raised
   d. Stressful circumstances in his life
   e. A genetic or inherited problem
   f. God's will

4) In your opinion, how likely is it that Jaime's situation will improve on its own?
   a. Very likely
   b. Somewhat likely
   c. Not very likely
   d. Not at all likely

5) In your opinion, how likely is it that Jaime's situation will improve with treatment?
   a. Very likely
   b. Somewhat likely
   c. Not very likely
   d. Not at all likely

6) Should Jaime do any of the following:

	Should do: (Yes=1, No=2, Don't know=3)	Rank Order
No Treatment		
Talk to family and friends about it		
Talk to a minister, priest, rabbi, or other religious leader		
Go to a general medical doctor for help		
Go to a psychiatrist for help		
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional		

for help		
Go to a spiritual or natural healer for help		
Join a self-help group where people with similar problems help each other		
Take non-prescription medication, like over the counter sleeping pills		
Take prescription medication		
Check into a mental hospital		

Vignette C

Sara is a 22 year old woman of Hispanic descent and a recent college graduate working in banking. A year ago, Sara sniffed cocaine for the first time with friends at a party. During the last few months, she has been snorting it in binges that last several days at a time. She has lost weight and often experiences chills when binging. Sara has spent her savings to buy cocaine. When Sara's friends try to talk about the changes they see, she becomes angry and storms out. Friends and family have also noticed missing possessions and suspect Sara has stolen them. She has tried to stop snorting cocaine, but can't. Each time she tries to stop, she feels tired, depressed, and is unable to sleep. She lost her job a month ago, after not showing up for work.

1) How serious would you consider Sara's problem to be – very serious, somewhat serious, not very serious, or not at all serious?
   1 Very serious
   2 Somewhat serious
   3 Not very serious
   4 Not at all serious

2) Does Sara have a mental illness? Why or why not?

   If yes, what kind of mental illness might it be? _____

3) Sara's situation was likely caused by (rank 1 Very likely, 2 Somewhat likely, 3 Not very likely, 4 Not at all likely)
   a. His or her own behavior
   b. A chemical imbalance in the brain
   c. The way he was raised
   d. Stressful circumstances in his life
   e. A genetic or inherited problem
   f. God's will

4) In your opinion, how likely is it that Sara's situation will improve on its own?
    a. Very likely
    b. Somewhat likely
    c. Not very likely
    d. Not at all likely

5) In your opinion, how likely is it that Sara's situation will improve with treatment?
    a. Very likely
    b. Somewhat likely
    c. Not very likely
    d. Not at all likely

6) Should Sara do any of the following:

	Should do: (Yes=1, No=2, Don't know=3)	Rank Order
No Treatment		
Talk to family and friends about it		
Talk to a minister, priest, rabbi, or other religious leader		
Go to a general medical doctor for help		
Go to a psychiatrist for help		
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help		
Go to a spiritual or natural healer for help		
Join a self-help group where people with similar problems help each other		
Take non-prescription medication, like over the counter sleeping pills		
Take prescription medication		
Check into a mental hospital		

Vignette D

Kevin is 28 year old African American male who is a dedicated social worker. During the last month Kevin has started to drink more than his usual amount of alcohol. In fact, he has noticed that he needs to drink twice as much as he used to to get the same effect. Several times he has tried to cut down or stop drinking but he can't. Each time he has tried to cut down, he became very agitated, sweaty, and he couldn't sleep, so he took another drink. His family has complained that he is often hung-over and has become unreliable, making plans one day, and canceling them the next.

1) How serious would you consider Kevin's problem to be – very serious, somewhat serious, not very serious, or not at all serious?

1 Very serious
2 Somewhat serious
3 Not very serious
4 Not at all serious

2) Does Kevin have a mental illness? Why or why not?

   If yes, what kind of mental illness might it be? _____

3) Kevin's situation was likely caused by (rank 1 Very likely, 2 Somewhat likely, 3 Not very likely, 4 Not at all likely)
   a. His or her own behavior
   b. A chemical imbalance in the brain
   c. The way he was raised
   d. Stressful circumstances in his life
   e. A genetic or inherited problem
   f. God's will

4) In your opinion, how likely is it that Kevin's situation will improve on its own?
   a. Very likely
   b. Somewhat likely
   c. Not very likely
   d. Not at all likely

5) In your opinion, how likely is it that Kevin's situation will improve with treatment?
   a. Very likely
   b. Somewhat likely
   c. Not very likely
   d. Not at all likely

6) Should Kevin do any of the following:

	Should do: (Yes=1, No=2, Don't know=3)	Rank Order
No Treatment		
Talk to family and friends about it		
Talk to a minister, priest, rabbi, or other religious leader		
Go to a general medical doctor for help		
Go to a psychiatrist for help		
Go to a therapist or counselor, like a psychologist, social worker, or other mental health professional for help		
Go to a spiritual or natural healer for help		

Join a self-help group where people with similar problems help each other		
Take non-prescription medication, like over the counter sleeping pills		
Take prescription medication		
Check into a mental hospital		

Part II – Attitudes Toward Seeking Professional Help
Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid, there are no right or wrong answers.

0 = Disagree 1 = Partly Disagree 2 = Partly Agree 3 = Agree

1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.

4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.

5. I would want to get psychological help if I were worried or upset for a long period of time.

6. I might want to have psychological counseling in the future.

7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.

8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.

9. A person should work out his or her own problems; getting psychological counseling would be a last resort.

10. Personal and emotional troubles, like many things, tend to work out by themselves.

Part III – Demographics
Please provide the following demographic information.

1) Gender

_____Male
_____Female

2) Race/Ethnicity (check all that apply):
_____Caucasian
_____Black/African American
_____Hispanic/Latino
_____Asian/Pacific Islander
_____American Indian/Alaskan Native
_____Other

3) Age _____

4) Area of Study/Major _____

5) Highest Degree Obtained _____

6) Current City and State of Residence _____

7) Total Household Income
_____Below $20,000
_____$20,000-$29,999
_____$30,000-$39,999
_____$40,000-$49,999
_____$50,000-$59,999
_____$60,000-$69,999
_____$70,000-$79,999
_____$80,000-$89,999
_____$90,000-$99,999
_____$100,000-$149,999
_____More than $150,000

8) What is your current marital status?
_____Single, Never Married
_____Married
_____Separated
_____Divorced
_____Widowed

9) What is your religious affiliation?
_____Protestant Christian
_____Roman Catholic
_____Evangelical Christian
_____Jewish
_____Muslim
_____Hindu

_____Buddhist
_____Other (Please List)

APPENDIX C

INSTITUTIONAL REVIEW BOARD NOTICE OF COMMITTEE ACTION

THE UNIVERSITY OF
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INSTITUTIONAL REVIEW BOARD
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NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
  Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 14103101
PROJECT TITLE: An Evaluation of the Attitudes, Beliefs, and Mental Health Literacy of Young African-American College Graduates
PROJECT TYPE: New Project
RESEARCHER(S): Marshae McNeal
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Educational Studies and Research
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 10/31/2014 to 10/30/2015
Lawrence A. Hosman, Ph.D.
Institutional Review Board

REFERENCES

Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Alfred, M. V. (2002). The promise of sociocultural theory in democratizing adult education. In M. V. Alfred (Ed.), Learning and sociocultural contexts: Implications for adults, community, and workplace (pp. 3-13). *New Directions for Adult and Continuing Education*, 96. San Francisco, CA: Jossey-Bass. doi: 10.1002/ace.74

American Psychiatric Association. (2009). *Let's talk facts about mental health in the African American community.* Retrieved from http://www.psychiatry.org/mental-health/people/african-americans

American Psychiatric Association. (2012). *Mental health: A guide for African Americans and their families.* Retrieved from http://www.psychiatry.org/practice/professional-interests/diversityomna/diversity-resources/----mental-health--a-guide-for-african-americans-and-their-families

Barbian, J. (2003). Moving toward diversity. *Training, 40*(2), 44-46.

Bartlett, H., Travers, C., Cartwright, C., & Smith, N. (2006). Mental health literacy in rural Queensland: results of a community survey. *Australian and New Zealand Journal of Psychiatry, 40*, 783-789.

Bastable, S. B. (2006). Essentials of patient education. Sudbury, MA: Jones and Bartlett

Baumgartner, L. M. (2011). The role of adult learning in coping with chronic illness. In

L. H. Hill (Ed.), Adult education for health and wellness (pp. 7-16). *New Directions for Adult and Continuing Education*, (130), San Francisco, CA: Jossey-Bass. doi: 10.1002/ace.406

Bourget Management Consulting, Canadian Alliance on Mental Illness and Mental Health. (2007, May). *Mental health literacy: A review of the literature*. Retrieved from http://www.camimh.ca/files/literacy/LIT_REVIEW_MAY_6_07.pdf

Broman, C. L. (2012). Race differences in the receipt of mental health services among young adults. *Psychological Services*, *9*(1), 38-48. doi:10.1037/a0027089

Cabassa, L. J. (2009, January). Mental health literacy in the United States: A systematic review of population based studies. Society for Social Work and Research. Retrieved from http://sswr.confex.com/sswr/2009/webprogram/Paper9619.html

Centers for Disease Control and Prevention (2011). *Mental health basics*. Retrieved from http://www.cdc.gov/mentalhealth/basics.htm

Chervin, C., Clift, J., Woods, L., Krause, E., & Lee, K. (2012). Health literacy in adult education: A natural partnership for health equity. *Health Promotion Practice, 13*(6), 738-746. doi: 10.1177/1524839912437367

Cheslock, P. A. (2005). Assessing mental health literacy of first- and third- year medical students: Knowledge and beliefs about mental disorders (Doctoral dissertation, DigitalCommons@PCOM). Retrieved from http://digitalcommons.pcom.edu/psychology_dissertations/28

Dana, R. H. (2002). Mental health services for African Americans: A cultural/racial perspective. *Cultural Diversity and Ethnic Minority Psychology, 8*(1), 3-18.

Diehl, S. J. (2011). Health literacy education within adult literacy instruction. In

L. H. Hill (Ed.), Adult Education for health and wellness (pp. 29-41). *New Directions for Adult and Continuing Education*, 130, San Francisco, CA: Jossey-Bass. doi: 10.1002/ace.408

Farrer, L., Leach, L., Griffiths, K., Christensen, H., & Jorm, A. (2008). Age differences in mental health literacy. *BMC Public Health, 8*, 125. doi:10.1186/1471-2458-8-125

Ferdman, B. M. (1990). Literacy and cultural identity. *Harvard Educational Review, 60*(2), 181-204.

Fischer, E., & Farina, A. (1995). Attitudes toward seeking psychological professional help: A shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368-373.

Fischer, E. H., & Turner, J. L. (1970). Orientations to seeking professional psychological help: development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*(1), 79-90.

Fishbein, M. (.Ed.). (1967). *Readings in Attitude and Theory Measurement*. New York, NY: John Wiley and Sons, Inc.

Freedman, A. M., Miner, K. R., Echt, K. V., Parker, R., & Cooper, H. F. (2011). Amplifying diffusion of health information in low-literate populations through adult education health literacy classes. *Journal of Health Communication*, *16,* 119-133. doi:10.1080/10810730.2011.604706

Gary, F. A. (2005). Stigma: Barrier to mental health care among ethnic minorities. *Issues in Mental Health Nursing*, *26* (p. 10), 979-999.

Goldney, R. D., & Fisher, L. J. (2008). Have broad-based community and professional

education programs influenced mental health literacy and treatment seeking of those with major depression and suicidal ideation? *Suicide and Life-Threatening Behavior, 38*(2), 129-142. doi: 10.1521/suli.2008.38.2.129

Greenberg, D. (2001). A critical look at health literacy. *Adult Basic Education, 11*(2), 67-79.

Gulliver, A., Griffiths, K., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry*, *10,* 113. doi: 10.1186/1471-244X-10-113

Guy, T. C. (1999). Culture as context for adult education: The need for culturally relevant *New Directions for Adult and Continuing Education*, 82, 5. San Francisco, CA: Jossey-Bass. doi: 10.1002/ace.8201

Hamm, N. (2012, October). Black folks and mental health: Why do we suffer in silence? *Ebony Magazine*. Retrieved from http://www.ebony.com/wellness-empowerment/black-folks-and-mental-health-610#axzz2dKDSiHf9

Hill, L. H. (2011). Editor's notes. In L.H. Hill (Ed.), Adult Education for health and wellness (pp. 1-5). *New Directions for Adult and Continuing Education*, (130), San Francisco, CA: Jossey-Bass. doi: 10.1002/ace.405

Howard, D. H., Sentell, T., & Gazmararian, J. (2006). Impact of health literacy on socioeconomic and racial differences in health in an elderly population. *Journal of General Internal Medicine, 21*, 857-861. doi: 10.1111/j.1525-1497.2006.00530.x

Hsu, Y. (2008, March*). The health and literacy of U.S. adults across GED credential recipients, high school graduates, and non-high school graduates*. Paper presented at the annual conference of the American Educational Research

Association, New York, NY. Retrieved from http://www.gedtestingservice.com /uploads/files/14bb31cc51f41434974270b7c8b79ac7.pdf

Hucks-Bradshaw, T. (2012, August 30). Black suicide: The truth behind the stigma. Retrieved from http://blackdoctor.org/12194/black-suicide-stigma/

John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist, 31*(3/4), 191-206.

Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *The British Journal of Psychiatry, 177*, 396-401.

Jorm, A. F., Barney, L. J., Christensen, H., Highet, N. J., Kelly, C. M., & Kitchener, B. A. (2006*).* Research on mental health literacy: what we know and what we still need to know. *Australian and New Zealand Journal of Psychiatry, 40*, 3-5.

Jorm, A.F. (2012). Mental Health Literacy: Empowering the Community to Take Action for Better Mental Health. *American Psychologist, 67* (3), 231-243. doi: 10.1037/a0025957

Keenan, D. P., AbuSabha, R., & Robinson, N. G. (2002). Consumers' understanding of the Dietary Guidelines for Americans: Insights into the future. *Health Education and Behavior, 29*(1), 124-135. doi: 10.1177/109019810202900111

Kerka, S. (2000). *Health and adult literacy practice application brief no. 7*. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED 438450). Retrieved from http://files.eric.ed.gov/fulltext/ED438450.pdf

Kitchener, B., & Jorm, A. (2002). Mental health first aid training for the public:

evaluation of effects on knowledge, attitudes and helping behavior. *BMC Psychiatry*, *2,* 10. doi:10.1186/1471-244X-2-10

Lauber, C., Ajdacic-Gross, V., Fritschi, N., Stulz, N., & Rössler, W. (2005). Mental health literacy in an educational elite -- an online survey among university students. *BMC Public Health*, *5*, 44. doi: 10.1186/1471-2458-5-44

Lin, L. (2006). Cultural dimensions of authenticity in teaching. *New Directions for Adult and Continuing Education*, 111, San Francisco, CA: Jossey-Bass. doi: 10.1002/ace.228

Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: labels, causes, dangerousness, and social distance. *American Journal of Public Health*, 89(9), 1328-1333.

Marcus, M. A., Westra, H. A., Eastwood, J. D., Barnes, K. L., & Mobilizing Minds Research Group. (2012). What are young adults saying about mental illness? An analysis of internet blogs. *Journal of Medical Internet Research, 14*(1), e17. doi: 10.2196/jmir.1868

Masuda, A., Anderson, P. L., & Edmonds, J. (2012). Help-seeking attitudes, mental health stigma, and self-concealment among African American College Students. *Journal of Black Studies, 43*(7), 773-786. doi: 10.1177/0021934712445806

Maulik, P. K., Mendelson, T., & Tandon, S. D. (2011). Factors associated with mental health services use among disconnected African-American young adult population. *Journal of Behavioral Health Services & Research, 38*(2), 205-220. doi: 10.1007/s11414-010-9220-0

McKenzie, J. F., & Smeltzer, J. L. (1997). Planning, Implementing and Evaluating Health

Promotion Programs: A Primer (2nd ed.). Needham Heights, MA: Allyn and Bacon.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in Adulthood: A Comprehensive Guide* (3rd ed.). San Francisco, CA: Jossey-Bass.

Mezirow, J. (1997). Transformative Learning: Theory to Practice. In P. Cranton (Ed.) *New Directions for Adult and Continuing Education* (pp. 5-12). doi: 10.1002/ace.7401

Mezirow, J. (2003). *Epistemology of transformative learning*. Unpublished manuscript, Retrieved from http://184.182.233.150/rid=1LW06CB3L-1R1W965-1Z5Z/Copy%20of%20Mezirow_EpistemologyTLC.pdf

Montano, D. E., & Kasprzyk, D. (2002). The theory of reasoned action and the theory of planned behavior. In K. Glanz, B. K. Rimer, & F. M. Lewis (Eds.), *Health Behavior and Health Education: Theory, Research, and Practice* (3rd ed.) (pp. 67-98). San Francisco, CA: Jossey-Bass.

National Alliance for Mental Illness. (2009). African American community mental health (Fact Sheet). Retrieved from http://www.nami.org/Content/ContentGroups/Multicultural_Support1/Fact_Sheets1/AfricanAmerican_MentalHealth_FactSheet_2009.pdf

Novitzky, J. (2009). Towards a health literacy curriculum. *Adults Learning*, *20*(5), 28-29.

Olsson, D. P., & Kennedy, M. G. (2010). Mental health literacy among young people in a

small US town: recognition of disorders and hypothetical helping responses. *Early Intervention in Psychiatry, 4*(4), 291-298. doi: 10.1111/j.1751-7893.2010.00196.x

Pescosolido, B. A., Martin, J. K., Link, B. G., Kikuzawa, S., Burgos, G., Swindle, R., & Phelan, J. (1996). *Americans' views of mental health and illness at century's end: Continuity and change.* Bloomington, IN: Indiana Consortium of Mental Health Services Research.

Pescosolido, B. A., Monahan, J., Link, B. G., Stueve, A., & Kikuzawa, S. (1999). The public's view of the competence, dangerousness, and need for legal coercion of persons with mental health problems. *American Journal of Public Health*, 89(9), 1339-1345.

Philippi, J. (2010). Transformative learning in healthcare. *PAACE Journal of Lifelong Learning, 19*, 39-54.

Pleasant, A. (2011). Health literacy: An opportunity to improve individual, community, and global health. In L.H. Hill (Ed.), Adult Education for health and wellness (pp. 43-53). *New Directions for Adult and Continuing Education*, 130, San Francisco, CA: Jossey-Bass. doi: 10.1002/ace.409

Ranahan, P. (2010). Mental health literacy: A conceptual framework for future inquiry into child and youth care professionals' practice with suicidal adolescents. *Child & Youth Care Forum*, *39*(1), 11-25. doi: 10.1007/s10566-009-9087-5

Reavley, N. J., & Jorm, A. F. (2011). National survey of mental health literacy and stigma. Commonwealth Department of Health and Aging, Canberra. Retrieved from ttp://pmhg.unimelb.edu.au/research_settings/general_community/?a=636496

Redding, C., Rossi, J., Rossi, S., Velicer, W., & Prochaska, J. (2000). Health behavior models. *International Electronic Journal of Health Education*, *3*180-193.

Regier, D., Hirschfeld, R., Goodwin, F., Burke, J., Lazar, J., & Judd, L. (1988). The NIMH depression awareness, recognition, and treatment program: structure, aims, and scientific basis. *The American Journal of Psychiatry*, *145*(11), 1351-1357.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. V. (2005). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health, 4*(3), 1-34.

Rudd, R. E. (2007). Health literacy skills of U.S. adults. *American Journal of Health Behavior, 31*(1), S8-S18.

Rudd, R. E., Anderson, J. E., Oppenheimer, S., & Nath, C. (2007). Health literacy: An update of medical and public health literature. In J.P. Comings, B. Garner, & C., Smith (Eds), *Review of Adult Learning and Literacy* (pp. 175-204). Mahway, NJ: Lawrence Erlbaum Associates.

Satcher, David. (2001). *Mental health: Culture, race, and ethnicity – A supplement to mental health: A report of the Surgeon General*. Washington, D.C.: U.S. Department of Health and Human Services.

Satcher, D., & Higginbotham, E. (2008). The public health approach to eliminating disparities in health. *American Journal of Public Health, 98*(3), 400-403. doi: 0.2105/AJPH.2007.123919

Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). San Francisco, CA: Jossey-Bass.

Sentell, T. L., & Ratcliff-Baird, B. (2003). Literacy and comprehension of Beck

Depression Inventory response alternatives. *Community mental health journal*, *39*(4), 323-331.

Sharp, W. (2007). Help-seeking and mental health education: An evaluation of a classroom-based strategy to modify help-seeking for mental health problems. *Dissertation Abstracts International: Section B. Sciences and Engineering, 68*(6), 4143.

Speller, H. K. (2005). *Mental health literacy: A comparative assessment of knowledge and opinions of mental illness between Asian Americans and Caucasian college students.* (Unpublished master's thesis). Boston College, Chestnut Hill, MA. (System No. 000007560)

Stansbury, K. L., Wimsatt, M., Simpson, G., Martin, F., & Nelson, N. (2011). African American college students: Literacy of depression and help seeking. *Journal of College Student Development*, *52*(4), 497-502. doi: 10.1353/csd.2011.0058

Schwartz, L. M., Woloshin, S., Black, W. C., & Welch, H. G. (1997). The role of numeracy in understanding the benefit of screening mammography. *Annals of Internal Medicine, 127*(11), 966-972.

Schwartzberg, J. G., Cowett, A., VanGeest, J., & Wolf, M. S. (2007). Communication techniques for patients with low health literacy: A survey of physicians, nurses, and pharmacists. *American Journal of Health Behavior, 31*(1), S96-S104.

Thurston I. B., & Phares, V. (2008). Mental health service utilization among African American and Caucasian mothers and fathers. *Journal of Consulting and Clinical Psychology, 76*(6), 1058-1067. doi: 10.1037/a0014007

U.S. Department of Health and Human Services. Office of Disease Prevention and Health

Promotion. (2011). *Healthy People 2020*. Washington, D.C. Retrieved from http://www .healthypeople.gov/2020/LHI/mentalHealth.aspx

U.S. Department of Health and Human Services. Office of Minority Health. (2012). Mental health and African Americans. Retrieved from http://minorityhealth.hhs. gov/templates/content.aspx?ID=6474

U.S. Department of Health and Human Services. Office of the Surgeon General. (2010). Mental and emotional well-being. Retrieved from http://www.surgeongeneral.gov /initiatives/prevention/strategy/mental-emotional-well-being.pdf

von dem Knesebeck, O., Mnich, E., Daubmann, A., Wegscheider, K., Angermeyer, M. C., Lambert, M., Karow, A., Harter, M., & Kofahl, C. (2013). Socioeconomic status and beliefs about depression, schizophrenia and eating disorders. *Social Psychiatry and Psychiatric Epidemiology*, *48*(5), 775-782. doi: 10.1007/s00127-012-0599-1

Whaley, A. L. (2001). Cultural mistrust and mental health services for African-Americans: A review and meta-analysis. *The Counseling Psychologist, 29*(4), 513-531. doi: 10.1177/0011000001294003

White, S., Chen, J., & Atchison, R. (2008). Relationship of preventive health practices and health literacy: A national study. *American Journal of Health Behavior, 32* (3), 227-242. doi:10.5555/ajhb.2008.32.3.227

World Health Organization. (2004). *Prevention of mental disorders: Effective interventions and policy options* (ISBN 924159215X). Retrieved from http://www.who.int/mental_health/evidence/en/prevention_of_mental_disorders_sr.pdf

Wright, A., Jorm, A. F., Harris, M. G., & McGorry, P. D. (2007). What's in a name? Is accurate recognition and labelling of mental disorders by young people associated with better help-seeking and treatment preferences? *Social Psychiatry and Psychiatric Epidemiology, 42*(3), 244-250. doi: 10.1007/s00127-006-0156-x

Zarcadoolas, C., Pleasant, A., & Greer, D. S. (2005). Understanding health literacy: an expanded model. *Health Promotion International*, *20*(2), 195-203. doi: 10.1093/heapro/dah609